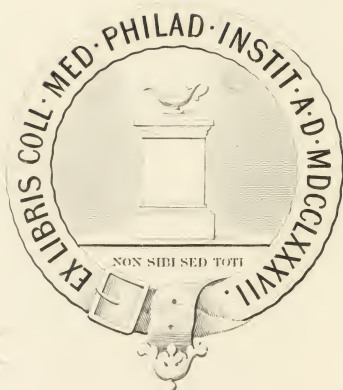




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THE

AMERICAN PRACTITIONER:

A MONTHLY JOURNAL OF

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EDITED BY

DAVID W. YANDELL, M.D.

Professor of the Science and Art of Surgery and Clinical Surgery, University of Louisville,

AND

THEOPHILUS PARVIN, M.D., LL.D.

Professor of Obstetrics and the Medical and Surgical Diseases of Women, Medical College
of Indiana.

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LIST OF CONTRIBUTORS.

SAMUEL W. GROSS, A.M., M.D.
J. P. THOMAS, M.D.
W. H. TAYLOR, M.D.
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IRA A. E. LYONS, M.D.
W. F. STIRMAN, M.D.

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

ON THE CURABILITY OF MALIGNANT TUMORS OF THE BREAST BY ADEQUATE OPERATIONS.*

BY SAMUEL W. GROSS, A.M., M.D.

Surgeon to and Lecturer on Clinical Surgery in the Jefferson Medical College Hospital and the Philadelphia Hospital.

In my treatise on Tumors of the Mammary Gland, which was issued from the press only a few weeks ago, I have endeavored to lessen, if not overcome, the reproach which has from time immemorial been attached to the removal of malignant diseases of the breast, by calling prominent attention to the modern doctrine of their primarily local nature, and to the possibility of assuring complete recovery by attacking the involved organ with a bold hand.

The malignity, or auto-infectiousness, so to speak, of a mammary neoplasm evinces itself, first, by its extension to the

* Being an abstract of a paper read before the Indiana, Illinois, and Kentucky Tri-States Medical Society, at its sixth annual meeting held in Louisville, November 10, 1880.

surrounding tissues, through which it continuously enlarges, occasions the development of secondary tumors in its vicinity, and is the cause of recurrence or reproduction after removal; second, by the transference of its cells to the associated lymphatic glands, in which they multiply and form growths which not only invade the adjacent structures, but act as additional centers of general infection; and third, by the occurrence of metastatic tumors in remote organs and tissues. These three attributes—namely, the contamination of the neighboring tissues, the implication of the lymphatic glands, and the development of similar growths in the viscera—may be common to a mammary tumor, or one or two alone may be met with; so that there is a scale of malignity for the different neoplasms of this class.

Myxoma and adenoma, of which the one originates in the connective tissue framework of the mamma and the other in the cells of the secreting apparatus, never infect the glands or the viscera; but they are eminently recurrent tumors, and come, therefore, under the classification of the semi-malignant growths of some practical surgeons. Myxoma reproduces itself in thirty-three per cent and adenoma in fifty per cent of all cases; so that the removal of the entire breast and its coverings, if they be implicated, and of recurrent growths as fast as they appear, suffices to bring about a cure.

Sarcoma, which is made up of embryonic connective tissue, and is usually described as fibroplastic, fibronucleated, or recurrent fibroid tumor, must be included among the worst of the mammary neoplasms, although it is generally regarded as being of limited malignity, most writers teaching that its tendency is to recur, but losing sight of the fact that it produces metastases. Unlike carcinoma, it does not affect the associated lymphatic glands; but the invasion of the surrounding tissues is shown by local reproduction in sixty-one per cent of all operations, and post-mortem inspection discloses visceral growths in fifty-seven per cent of all instances. While recurrence in loco is not so frequent nor so early as in carcinoma, sarcoma is followed by metastatic tumors in seven per cent more of cases than is that

affection. These are startling facts, and I must assume the credit of having been the first to establish them.

In view of the recurring nature of sarcoma and of its marked liability to infect the viscera, the surgeon must interfere early. He should discard partial operations, and make the rule absolute to amputate the entire breast with its investing skin and fat, by a circular incision, dissect off the fascia of the pectoral muscle, and mop the large wound with a strong solution of chloride of zinc, or touch it with the iron at a dull-red heat. Recurrent growths must be freely extirpated as rapidly as they appear, since in this way suffering may be alleviated, life be prolonged, visceral contamination be averted, and permanent recovery be assured in a certain proportion of cases. In an example of medullary small spindle-celled sarcoma Professor Gross succeeded, after removing fifty-two tumors, by twenty-three distinct operations in four years and a half, in the last of which large portions of the pectoral and intercostal muscles were cut away, in checking reproductions. Nearly eleven years subsequently the woman was entirely well. In a similar case Gay had added nine years to his patient's life at the date of the last report, and Heath and Haward kept their patients alive for thirteen years.

Carcinoma, which is an infiltrating epithelial neoplasm, and is ordinarily known as cancer, is the most malignant of all the tumors of the mamma. Its course is not only more rapid than that of sarcoma, the average duration of life being only thirty-nine months from its first observation to its final termination after operation, against seven years for sarcoma, but it implicates the lymphatic glands in sixty-four per cent of all cases, recurs in eighty per cent after extirpation, and occasions metastatic deposits in fifty per cent of all instances. These properties, along with the discouraging results following incomplete operations, have led some surgeons to refrain from interfering altogether, while others remove the disease with the view merely to avert mental and physical suffering. That both of these practices are erroneous is conclusively shown by the facts, first, that extirpation of the carcinomatous mass adds twelve months to

the life of the patient; and secondly, that bold measures result in permanent recovery in 10.51 per cent of all cases.

In the treatise already referred to I use the following language in regard to what I mean by the term cure or permanent recovery: "Metastatic tumors develop in thirty-one months, and death usually ensues, no matter whether the patients have been operated upon or not, in thirty-three months on an average. Local reproduction after removal is witnessed in less than one case out of every hundred after the expiration of three years; so that if the patient survives three years after the last operation without recurrence, or dies of some intercurrent malady under the same circumstances, I assume that she has recovered. Although, of course, each case will have to be dealt with in accordance with its individual merits, the question must be decided by facts based upon the general life of the disease. Of four hundred and eighty-five cases of ordinary scirrhus, medullary, colloid, and atrophying carcinoma, in which the history is complete, fifty-one or 10.51 per cent—and forty-seven were still living—fulfilled these requirements, the average life after operation having been four years and ten months. Of the cases in which the affection pursued a natural course only 1.5 per cent survived six years, while of those cured by the knife thirty per cent were living free from disease after the expiration of six years, four were alive for more than seven years, and the remaining eleven were well for periods which varied between eight and fifteen years."

The view that carcinoma is in the first instance a local disease, and that it is curable by thorough operations practiced before it has disseminated itself extensively in the adjacent structures or has tainted the general system, is rapidly gaining adherents among some of the best observers of the world, among whom may be mentioned Simon, Moxon, Arnott, Payne, Hutchinson, and Sir William Gull, of England; Nussbaum, of Munich; Fischer, of Breslau; Esmarch, of Kiel; Kocher, of Bonn; and Billroth, of Vienna. Apart from the practical test of the results of surgical interference, a study of the general

pathology of the disease shows, first, that it is at the outset a local degeneration of the mamma, and that its tendency is to advance toward the surface before it invades the deeper structures, the lymphatic glands, and the viscera; and secondly, that local infection does not ensue, on an average, before the expiration of thirteen months, the skin being involved in fourteen months, the lymphatic glands in fifteen months, the walls of the chest in twenty-two months, and the viscera in thirty-one months. Hence if the carcinomatous mamma can be completely gotten rid of before it has contaminated the adjacent structures there is no reason why the remedy should not prove to be final.

When the tumor is of moderate volume, and devoid of superficial and deep attachments and palpable enlargement of the lymphatic glands, the operation which I now invariably practice and earnestly recommend is to remove the entire breast and its coverings by a circular incision, search for any outlying lobules that may be disseminated throughout the mammary region, dissect off the fascia of the pectoral muscle, and prolong the outer portion of the incision into the axilla with a view to its thorough exploration. Although the glands may have eluded detection previous to surgical interference, careful examination will usually disclose that several are already converted into secondary tumors; and in this event the axillary space must be thoroughly cleaned out, with the object of getting rid of so many independent sources of infection of the adjacent tissues and the associated glands. Ample experience shows, first, that the seats of recurrence, or, rather, further spread of the disease, after operation, are the skin, paramammary fat, remains of the mamma, pectoral fascia, and glands of the axilla; and secondly, that recurrence in the axilla is more frequent by twenty per cent after removal of the breast alone than when that cavity was freed of its contents simultaneously with the extirpation of the breast. Hence it is that bold measures alone can be depended upon to assure a successful issue.

Even when the skin, pectoral fascia, muscles, and glands are implicated, provided the evidences of local dissemination be not

too extensive, thorough operations frequently result in permanent recovery. Thus out of forty-eight of the fifty-one cures in which the extent of the operation is noted, in nineteen the entire breast was amputated and the axilla was cleaned out; and in several of these there were nodules in the skin and the upper layer of the great pectoral muscle was removed. It is, moreover, comforting to know that the glands may be merely the seat of irritative hyperplasia, since in three cases in which they were permitted to remain the patients were free from recurrence respectively for five years and nine months, six years and one month, and ten years and ten months. Glandular involvement is, however, of bad prognostic import, as the chances for permanent recovery are three times greater when the breast alone requires amputation. The same statement is true of extensive infiltration of the pectoral muscles, but these may be cut away with a free hand with some prospect of relief.

As a precaution against local reproduction the wound may be sponged with a strong solution of chloride of zinc or be seared with the hot iron, and the latter agent should always be resorted to when nodules have been cut out of the pectoral or intercostal muscles or the ribs or costal cartilages.

While it is true that adequate operations greatly increase the mortality, they are certainly justifiable, as they alone can be relied upon to cure a disease which is so inevitably lethal as carcinoma. In favor of the method it may be said that as the wound is an open one the danger of the retention and putrefaction of discharges and of the evil consequences which follow these accidents is obviated. In my own hands the operation has been attended with the best results, since of ten cases in which I amputated the entire mamma and its coverings, dissected off the pectoral fascia, and cleaned out the axilla, all recovered.

PLACENTA PREVIA.*

BY J. P. THOMAS, M.D.

While few subjects in the whole domain of obstetrics have (during the last two centuries) given rise to more discussion than placental presentations, it is only within the last fifty years that any real advance in the management of this freak of nature has been made. The ancients believed this abnormal position of the placenta to be the result of accident whereby it was detached from its proper site, to this being superadded the force of gravity. Portal is generally credited with the discovery that this position of the "after-burden," as he called it, was an original insertion of the placenta over or adjacent to the os internum. Cazeaux ascribes the discovery to Gifford, and without mentioning Portal credits Levret with having first directed attention to it, and demonstrated its frequency and danger, as well as pointing out the proper mode of detecting its existence, and adds, "The insertion of the placenta over the os uteri has been considered since the days of Levret as an inevitable cause of hemorrhage during the last three months of gestation and during the course of parturition."

Though the causes of placenta previa have been variously stated by different authors, our actual knowledge of the subject amounts positively to nothing. We know but little more than that perhaps once in six or seven hundred cases the placenta is placed over or near the os uteri. Cazeaux thought that the uterine mucous membrane is perhaps less swollen and turgid than when conception takes place in the natural attachments of the placenta, and that therefore it offers less obstruction to the descent of the ovule to the lower part of the uterine cavity, etc. Tyler Smith held that the ovule does not become impregnated until it reaches the lower part of the uterus in the preplacental attachments. But the cause of this location of the placenta

* Read before the McDowell Medical Society, October, 1880.

is as far from being understood now as it was two hundred years ago.

There are perhaps equally as many theories as to the source of the hemorrhage in placenta previa. I shall notice but one of these. Simpson, following Chapman, of Amptill, England, suggested that the source of the flow is from the placental vessels, and not, as is at present generally admitted, from the uterine surface. Hamilton, of Edinburgh, claimed that the hemorrhage proceeded from the separated portion of the placenta rather than from the ruptured uterine vessels. Simpson's earnest and able advocacy of the first theory, and the practice of detaching the placenta *en masse* which resulted, have been the cause of a most pernicious practice, namely, removing the placenta in all cases of placenta previa. This practice, based as it is upon the false theory that the hemorrhage is placental, and not uterine, has been the cause of the death of the child in many cases where by partial detachment of the placenta and immediate version or forceps-delivery both child and mother might have been saved. A mere glance at the anatomical distribution of the placental arteries, together with a study of its physiology, should, it seems to me, convince any one of the fallacy of this theory. Yet because in so many of his cases the hemorrhage ceased on the removal of the placenta, Simpson was, it seems, satisfied of its correctness. Tyler Smith, in dissenting from Simpson's theory, says, "Detachment of the placenta causes irritation, which excites the uterus generally, and in the muscular structure at the site of the placenta especially, to contraction, and in this way the hemorrhage is prevented or arrested." Certain authors have erroneously declared that uterine contractions actually increase the flow of blood. Aside from the fact that contractions still further detach the placenta, there is no reason why they should not aid in arresting hemorrhage, as they clearly do in post-partum flooding in natural labor. Speaking from individual observation, I believe that uterine contractions perform the same office in arresting hemorrhage in partial or complete placenta previa that they do in flooding after natural labor,

Barnes's zonular theory to the contrary notwithstanding, and that the apparent increase of the hemorrhage is, as stated by Playfair, but the expulsion of the blood already accumulated. Yet that Simpson's practice of detaching and removing the placenta is in some cases most excellent practice, experience teaches me. This opinion is based upon an experience of three cases, one of which I will briefly report. In this a centrally inserted placenta was detached and removed from necessity.

Mrs. W., aged thirty-eight, had six natural labors. In three of her pregnancies she had during the eighth month slight hemorrhages—the last, however, sufficiently profuse to demand a vaginal examination. I had difficulty in introducing a single finger, yet the diagnosis of central implantation was satisfactorily made out. The situation, with its attendant dangers, was fully explained to the husband, and premature delivery advised. But neither his entreaties nor my advice won her consent. I therefore enjoined perfect quiet in the horizontal position, and left instructions to call me immediately should hemorrhage recur. This advice was not followed. The patient continued to attend to her household duties, and, as I afterward learned, had attacks of hemorrhage every five or six days, which, however, ceased on lying down. Two weeks later I was sent for in great haste to find her in active labor, the os dilating rapidly, the placenta covering the cervix except a space large enough to permit the finger to touch the bag of waters and detect a vertex presentation. The patient, however, was so alarmingly prostrated from loss of blood that turning at that time was out of the question. I did not then, as now, have Barnes's invaluable dilators, and, fearing the tampon would but complicate the case by substituting a concealed for an open hemorrhage, I administered a full dose of ergot, and detached and, after ligating the cord, removed the placenta. I hoped that the bag of waters would take the place of the tampon and acting as a plug from within arrest the hemorrhage at least long enough to enable the patient to rally sufficiently to stand the operation of turning if not that of rupturing the membranes and delivering by forceps. But in

detaching the placenta I unintentionally ruptured the membranes, whereupon the head came down, the vertex engaged the os, and all hemorrhage immediately ceased. This fortunate result was not attained because the source of the hemorrhage was placental, nor by the contractions of the uterus alone, but appeared mainly due to the mere mechanical effect of the child's head, which, occupying the former site of the placenta, made such pressure upon the open mouths of the uterine veins that it served as a veritable plug. The contractions, stimulated by the ergot, were frequent, forcible, and somewhat prolonged, and must have assisted somewhat in arresting the hemorrhage, not only by closing the mouths of the vessels and hastening the descent of the head, but also by causing the bleeding surface to hug the head more closely. The pains were so strong and persistent and the head now so low in the pelvis that turning became impossible; and even had it not been, the patient, after two hours of exemption from hemorrhage, but in severe labor, was too much exhausted for the procedure; so the forceps were applied and a dead child delivered. Considering the excessive loss of blood and the severity of the pains, which were allowed to continue for so long a time because of not having my forceps at hand, the mother made a good recovery.

The foregoing case will serve to show that Simpson's practice of removing the placenta and leaving the case to nature altogether loses sight of the safety of the child. I think there are cases of central placental presentation, where the os is dilating or dilatable, and the labor has set in at full term or sufficiently near it to insure the viability of the child, when the safest practice for both mother and child would be the detachment and removal of the placenta and prompt delivery either by version or the forceps, the choice being determined by the circumstances of the individual case. In two such instances I have resorted to this procedure with the result of saving both mother and child, when I believe any other course would have resulted fatally to the children if not to the mothers also. The pressure of the head upon the bleeding surface of the uterus where the entire

placenta is removed is not, I think, as fully appreciated by authors as it should be; for certainly where contractions are active, and the head has descended well and is still advancing, this always acts as a plug and thus effects the arrest of the hemorrhage. May it not have been the most efficient cause in many cases reported by Dr. Simpson and others? The following case will, I think, go to prove that the child is not lost by simple waste of blood, but by asphyxia; while it will serve to show that the source of the hemorrhage is principally uterine, and not placental:

Several years ago I saw, in consultation with the late Dr. Porter, Mrs. M., about thirty years of age, a previously healthy woman, accustomed to work, the mother of four living children coming after natural and easy labors, these attended by a midwife only. I reached her bedside only in time to find her dying of hemorrhage caused by a centrally-implanted placenta, and she still undelivered. She gasped but three or four times after my arrival, and expired. She was flooding profusely when Dr. P. was called in, and was so much prostrated that he resorted to the tampon, using for the purpose a silk handkerchief, which, I may remark in passing, answers an excellent purpose where vaginal tampons are applicable, which, though contrary to high authority, I think are very few. The placenta still occupied an almost central position, with its margin only undetached, the os being sufficiently dilated to engage the head. With faint hopes of saving the child, as very feeble fetal movements could be felt, I performed cesarian section within twenty minutes of the death of the mother—perhaps less time—and a well-developed male child at full term, partially asphyxiated, but soon restored, was extracted. A few years ago he was a robust boy of ten years.

From 1870 to 1875 I produced premature delivery in three cases—one in the eighth month, one in the first week of the ninth, and one only two weeks before term—with the result of saving the life of the mothers, but with the loss of two of the children. The seventh-month child was delivered after partial

detachment of the placenta and podalic version. It was still-born. The eighth-month child was delivered after complete detachment of the placenta by immediate turning. Both child and mother lived and did well. The case in which labor was induced two weeks before the expiration of gestation was also delivered by turning, and nearly complete detachment of the placenta. The child lived only a few hours, and the mother had a tedious recovery, having an alarming attack of phlegmasia dolens.

In the past five years I have effected premature delivery in three cases after the seventh month, saving the lives of the mothers and one of the children. Though this so-called prophylactic treatment of placenta previa is indorsed by Barnes, Hewitt, Greenhalgh, and others, in England, and by others of note as Thomas and Parvin in this country, I am persuaded that in some cases it is an unnecessary procedure and in others unjustifiable as to the safety of the child. I venture this opinion notwithstanding Thomas reports eleven cases in which the practice was resorted to solely as a prophylactic measure, with a loss of but five children and the death of one mother, and she from puerperal septicemia, which might have occurred after natural labor. It is well known that a miscarriage is generally more dangerous than labor at term, and that version at best is always attended with danger to the child from pressure on the cord. Consequently in cases where the hemorrhage is slight and infrequent, and the patient can be closely watched and controlled, and some one of the bromides combined with hyoscyamus be continuously given, they can generally be conducted safely to the end of gestation without impairing to any considerable extent, by loss of blood, the physical powers of the woman. The hypnotics persistently given seem to control even the insensible contractions of the uterus, to which the hemorrhage is certainly due in some cases. Two cases of marginal placental attachment under my care were thus conducted to full term, the hemorrhage in each case being slight and occurring at the menstrual period only. Both were safely delivered of living children after partial

detachment of the placenta, and by podalic version, and within three weeks were well. In both cases the diagnosis of placental complication was clearly made out from the first hemorrhage.

Under such conditions then—that is, where the flow is slight and infrequent, and having in view the dangers incident to miscarriages, and the undeveloped state of the fetus, rendering its viability less certain—I ask, Would I have been justifiable in either case in inducing *prémature* delivery? In the history of Thomas's eleven cases this procedure was not only justifiable, but demanded in ten of them. But in his first case I think he should have temporized a little longer, at least. But as it is clearly impossible for the majority of general practitioners to give necessary attention in preplacental cases, and as it is an established fact that after the first occurrence of hemorrhage the woman is never free from danger until delivered, I am inclined to the opinion that in any case where the diagnosis is clear, the flow frequent and profuse, and the patient resides some distance from the medical attendant, premature delivery should be induced in the interest of the mother even before the period of viability of the child and without regard to its safety. But fortunately hemorrhage rarely occurs before this period. With Barnes's dilators there is but little risk of excessive hemorrhage, as they not only dilate the os sufficiently rapidly, but act so securely as a plug that in one of my cases the os was dilated by a gradual dilatation (three sizes being used), the placenta partially detached and turned back on itself, and the child delivered by version with but slight loss of blood, the uterus contracting promptly all the while.

There are cases in which nature proves herself competent to accomplish delivery with safety to both mother and child. In 1869 and 1870 two cases occurred in my practice which show what nature does sometimes accomplish, and how closely we imitate her when we induce premature delivery:

Mrs. C. was taken suddenly in labor, each pain being followed by a gush of blood. I reached her only in time to grasp the placenta as it emerged from the vulva. The labor was so

rapid and the contractions so powerful, the child under size (the pregnancy being only seven months and two weeks advanced), it almost instantly followed the placenta enveloped in the membranes. This child lived a few hours only, but the mother made a rapid recovery.

Mrs. K.'s case was similar, except she was about eight and a half months advanced in pregnancy. Here both mother and child were saved.

In both the placenta was first expelled, the child and membranes following almost instantly, and both made as good recoveries as after natural labor.

A case recently occurring in the practice of a confrère will still further illustrate how nature sometimes accomplishes safe delivery: Mrs. S., aged twenty-six, mother of three children, was seen by Dr. L. He found her fearfully prostrated by hemorrhage, so much so that he thought the loss of a few ounces more would have resulted in death. The flooding had fortunately entirely ceased; the placenta lay compressed between the head and the os, one third projecting into the vagina. He gave a large dose of fluid extract of ergot, and pressed the placenta back with his finger as the head advanced. No more hemorrhage occurred, labor proceeded, and a living, fully-matured child was spontaneously delivered.

In 1878 Mrs. R. was taken in labor and simultaneously with free hemorrhage. Dr. —, the family physician, was sent for, but being absent Drs. — and — were called in. They found the patient extremely prostrated, though the hemorrhage had ceased. They detected a nearly centrally-inserted placenta, and determined to endeavor to rally the woman by stimulants and bring her as quickly as possible to the point where version might be practiced. Just here the physician first sent for arrived, and declining to listen to the physicians in attendance proceeded at once to detach the placenta and turn the child. The shock proved too much for the already exhausted woman, and before the head escaped from the vulva she was dead. The child was alive, and still is, I believe.

Turning is *the* operation in placenta previa, and must continue to be with the general practitioner, and, in fact, with the great majority of the profession; first, because where the child has reached the period of viability, and is living, it offers the best chance, if performed before the mother has lost too much blood, for both mother and child; secondly, if the child is not viable or dead it is the quickest way to empty the womb of its contents, and thereby hasten contraction and save the mother; thirdly, it will be the operation most frequently resorted to, because comparatively few practitioners are supplied with the proper instruments, and when this is the case they seldom have them at hand, and they always have the best obstetrical instrument ever devised—the right arm and hand.

I have not alluded to the differential diagnosis of placenta previa because it is generally so easily made out by the touch and the mode and history of the development of the hemorrhage. I should perhaps add that I have never been able to detect the placental bruit in such cases as have occurred in my practice. In no case in which the os was sufficiently dilatable to admit either one or two fingers did the touch fail, whether the attachment was central or partial, to diagnose the case. If the insertion be marginal the os should be dilated sufficiently to admit two or more fingers, or, if need be, the whole hand, in order to discover the placental site and establish the diagnosis.

During an obstetric practice of twenty-five years I have met with but thirteen cases of placenta previa. In these but one mother was lost, but seven of the thirteen children were either stillborn or died—a mortality of over fifty per cent. Should further experience establish that premature delivery will lessen this fearful mortality, it should certainly always be performed whenever possible.

There is no emergency in the whole field of medicine which requires greater judgment or prompter action on the part of the physician than does placenta previa. The late Dr. A. K. Gardner, of New York, said, "Perhaps the greatest element requisite for an accoucheur is decision; he should be able to recognize

what is possible and what is impracticable, and early know what he can do and what he can not effect." He should always go armed with the best appliances for dilating the os uteri, for effecting speedy delivery, and arresting hemorrhage.

Since the above was read before the Society, the following case having occurred in my practice, I report it simply on account of its being so rare at so early a period of gestation:

C. R., mulatto, aged thirty, mother of three children, on October 30, 1880, was, after only two or three very severe pains, suddenly attacked with profuse uterine hemorrhage. The flooding was so alarming that I lost no time in examination, but immediately tamponed the vagina, with the effect of arresting the flow. No further hemorrhage occurring within two hours, the tampon was removed and the finger carried through the os, which, though rigid, readily allowed its introduction. I at once detected a presenting placenta, but in spite of the utmost gentleness of manipulation there came a sudden gush of blood almost as profuse as the first. A portion of the placenta had been torn away by my finger sufficiently large to admit it into the uterine cavity, when the hemorrhage at once ceased. The ovum must have escaped in some of the numerous clots discharged. I gave ergot in full doses, but without further detachment of the placenta. The os was not dilated sufficiently to admit two fingers, and with but one finger I found the removal of the placenta impossible. The case was therefore left to nature, but closely watched. On the fourth day the placenta came away in two small sloughs. On the fifth day the patient had a severe chill lasting about three hours, followed by high fever, some tympanites, and the usual septic symptoms. One dram of quinine given in doses of ten grains every three hours, together with four compound cathartic pills, arrested promptly and much to my surprise these dangerous symptoms. The patient stated that it had been two months and ten days since her last monthly show. She is now (November 10th) convalescing.

PREVENTION AND TREATMENT OF MAMMARY INFLAMMATIONS AFTER DELIVERY.*

BY W. H. TAYLOR, M.D.

Of the non-fatal complications of the puerperal state there is none which occasions more suffering to the patient or more annoyance to the physician than the various forms of inflammation of the breast, and it is probably equally true that there is none of which the treatment has been more unsatisfactory. Prof. Kehrer, of Giessen, has recently said that the conditions referred to are twenty per cent more frequent in city than in country, owing to the thin skin, the badly-developed nipple, and the smaller quantity of milk in the women of the city. A condition which, according to Kehrer, is found in about sixteen per cent of all cases of delivery, within a week after confinement, is the existence of one or more small fissures upon the nipple. Writers have classified these fissures according to their forms, as abrasions, excoriations, fissures, eczema, etc.; but believing that these various shapes are accidental varieties of one lesion, I regard such subdivision as of little practical value.

The *cause* of the lesion is the child's sucking, in which act the child compresses the nipple between its tongue and the roof of the mouth and draws it into the mouth, thereby subjecting it to firm compression and tension, whereby the epithelium is abraded and minute fissures formed. As this process is repeated at brief intervals, no opportunity for repair is afforded, but at each successive period of sucking the laceration is enlarged. From the intense pain experienced by the mother the flow of milk decreases; the child consequently makes greater suction effort, with corresponding injury to the nipple; so that it is not rare to have the child vomit small quantities of blood which it has drawn from the abrasions. The act of suckling is so exceedingly painful to the mother that it is postponed till the distension of the breast with milk compels her to submit to its

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being performed. The long-deferred nursing, the traction by the child's mouth, and the diminished flow of milk tend to increase the amount of blood in the gland, causing engorgement, an early stage of inflammation. The maternal heroism which prompts the mother to persist in nursing her child at such sacrifice of her own comfort, commendable though the spirit be, is fraught only with evil; for the conditions detailed are aggravated till the changes are such that suppuration of the gland is unavoidable.

Although we must recognize other influences—for example, cold, contusions, epidemic influences—as potential in the production of abscesses, yet I have sketched the most common history of such production.

The *treatment* of the fissures described is usually unsatisfactory. Medical literature shows a countless array of applications for sore, chapped, cracked, fissured, ulcerated nipples; and all, in my opinion, are of but little value; for, however great the remedial power of the application may be, it is rendered entirely nugatory by the sucking of the child, by which the fissures are necessarily torn open, so that whatever progress may have been made toward healing is undone each time the child is applied to the breast. With such opinions of the causation of fissured nipple but two means of treatment seem applicable; the first, the use of a nipple-shield, by which the nipple is protected to a considerable degree during sucking, is sufficient in mild cases, but is of little or no use in severe cases. The only remedy on which I rely, and which is adapted to all cases, is entire cessation from nursing with the affected nipple for from forty-eight to seventy-two hours, during which time the process of repair being uninterfered with by the child, healing will so far have progressed as to allow nursing with little or no suffering. Such suggestion usually awakens protest, on two grounds; first, that discontinuance of the use of the breast for the period mentioned will result in permanent cessation of the flow. While I can not deny its occasional occurrence, yet such result is exceptional. Usually the flow will be reestablished in a short time after reapplying the

child to the breast. But even if the danger of such cessation were great, the treatment is still to be advocated, for we shall thereby probably avert suppuration, when nursing must necessarily cease and other evils increase.

The second ground of opposition to the advice given is that cessation from nursing will lead to accumulation of milk in the breast, and that such accumulation will result in abscess. That cessation from nursing will lead to temporary induration of the breast is a matter of daily observation. That suppuration is likely to result from this accumulation of milk alone I do not admit. I say from such accumulation *alone*, for I believe the means resorted to to overcome it often lead to the apprehended evil. To guard against the anticipated ill consequences of cessation from nursing it is usual to resort to artificial means for removing the milk from the breast. I am persuaded that from these efforts the evils are greater than from the accumulation of milk. When we remember that irritation of the nipple by the child's mouth is the natural means for exciting the secretion it is obvious that the effort to remove the accumulation by drawing the nipple is unphilosophic and will be unsuccessful. Again: the use of various mechanical appliances, breast-pumps, etc., is often productive of serious injury by contusing the portion of the breast compressed by the instrument, and may possibly induce abscess.

With such views of the action of these appliances I discard them entirely and forbid all effort to remove the milk by suction. That it is desirable to relieve the tension of the breast which occurs for a few hours after nursing has ceased, must be recognized by all. For such purpose I have the breast very gently stroked with the hand with camphorated oil, the movement always being from the periphery toward the nipple. The effect of such manipulation continued from ten to fifteen minutes will be to cause the milk to flow. I seek to divert the blood from the breasts and to deplete by giving a saline purgative. If the pain be severe enough to demand anodynes, I give Dover's powder, because it both relieves pain and relaxes the

engorged tissue. With such management the fissured nipples heal, and threatened abscess is generally averted. That such happy result is always obtained can be said of no plan of treatment.

When suppuration seems inevitable our only course is to hasten it, and while awaiting the progress of the case to mitigate the discomfort. As a very important means of relief I urge support of the breast by means of a broad bandage passed under the breast and around the neck. By this means we relieve the upper part of the breast and the skin over it of the continuous dragging sensation consequent on its increased weight, and also facilitate the return of blood from the breast, thereby lessening the engorgement of the breast. If this support does not relieve the pain sufficiently I administer opiates freely.

Dr. J. S. Parry, following McClintock, advises late opening of abscess of the breast, and I am inclined to adopt the practice. When discharge is effected, as perfect antiseptic dressing as possible should be applied. As soon after evacuation of the pus as the breast will tolerate pressure I resort to strapping, expecting thereby to prevent reaccumulation of pus, to obliterate the cavity and hasten union of the opposed surfaces, to compress the distended blood-vessels, thereby lessening the engorgement, and by the continuous pressure to stimulate absorption of effused material.

CINCINNATI, O.

COCK'S OPERATION FOR IMPERMEABLE
STRICTURE.*

BY A. W. JOHNSTONE, M. D.

By reporting a case in which "Cock's operation" was performed, I wish to draw your thoughts to a method of handling impassable strictures which has not received the attention in America that in my opinion it deserves.

The patient on whom I operated is a strong and healthy mulatto of about thirty-eight years who has had urethral stricture since 1861. He has been treated at different times by surgeons in the army, in hospital, and at home. I saw him first in the summer of 1879 in consultation with Drs. Huffman and Mays, of Lancaster, Ky. After a prolonged attempt we succeeded in getting the smallest-sized filiform bougie through the main stricture, which was about an inch long and in the bulbous portion of the canal. There were several contracted places in the cavernous portion of the urethra, and a narrowed meatus. No part of the canal seemed healthy; all had a gristly feel. The stricture was so tight that Gouley's tunneled sound would not follow the guide, and as we had no other instrument at hand we were forced to give up the attempt to dilate.

I did not see the patient again until the December following, when I was called by these same gentlemen to do some form of urethrotomy. Assisted by them and Drs. McMurtry and Warren, of Danville, I examined the stricture and found I could pass no instrument whatever. As the stream had been coming only drop by drop for some time, and as our patient's strength was beginning to give way, it was evident that something must be done. Remembering the length and tortuosity of the stricture, we decided to tap the urethra behind it, after Cock's method, hoping at some future day to be able to pass a guide. This I did by passing the index finger of my left hand into the rectum and lodging it on the apex of the prostate; then taking a small

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bistoury and introducing its point in the median line about one and a half inches in front of the anus, with an up-and-down motion I carried it on toward my finger until I felt it just about to enter the prostate. I then turned it obliquely to my left, pushed it about a quarter of an inch further on, and withdrew it. I now took a grooved director and tried to guide it into the bladder with the finger that was still in the rectum, but failed. Fearing I had not opened the urethra sufficiently, I reintroduced the knife and made the inner part of the incision a little further to the right. After being put to bed and sleeping for an hour the patient got up and passed a large, bold stream through the opening.

From that time he has had no difficulty in passing his urine through the new passage, and with the exception of a little trouble at first with urethral fever and since then with redundant granulations he has progressed satisfactorily and has for some time been able to attend to his duties at the barber's chair. By his failure to use the bougies as directed the new opening at one time contracted below the point that we wished it to, but a seatangle tent soon restored it to a respectable caliber. He is so well satisfied with his condition that I doubt whether he will ever allow internal urethrotomy to be done; but even if he should not, his present state, though sterile, will not be a hard one to bear, for, as Mr. Cock expresses it, the man's micturition is merely assimilated to that of the other sex.

Those who have followed this clinical history are now ready to see how this operation takes the place in urethral surgery that lumbar colotomy has in intestinal. It would be out of place for me here to draw a parallel between the dangers produced by an obstructed intestine and a blocked urinary tract. It is enough to say that unless their contents find an outlet death is sure to follow from both.

The first duty of the surgeon is to save life, and only after that is assured is he to take conservative measures into consideration. So the first test of every operation must be its safety. The friends of Cock's procedure claim for it the safest place

among all the methods of opening an obstructed urethra without a guide. The dangers incident to the old operation justly won for it the reputation that Gross gives it, "that of all the operations in surgery this is the least to be coveted." Wheelhouse, Gouley, Teevan, and others have improved the instruments and operation so much that it is far more successful than it formerly was; but who is there today that can begin this operation on an old gristly stricture with a feeling of security? So far as I know, there has never been published a complete list of statistics of the old operation, and consequently we are not able to let figures speak on the comparative results of the two; but we are sure from the tone that those surgeons use who have tried Cock's method that it has been more satisfactory in their hands than the old one. Bryant says of this operation, "I have seen Mr. Cock frequently perform it. I have done it myself on many occasions, and have no hesitation in strongly recommending it as *the* operation for external urethrotomy without a staff. . . . I have described fully this admirable operation in the words of its originator, and believe it to be the only form of perineal section that ought to be performed in an impervious urethra. It is not sufficiently known."

Mr. Teevan, in the Lettsomian lectures for 1880, says that "the method known as Cock's operation ought to be performed for retention or for those cases of impassable stricture where the patient is too weak to undergo a prolonged operation;" but he thinks that the old operation, as improved by Avery, Wheelhouse, Gouley, and himself, is the one that should ordinarily be done. In the discussion of Sir Henry Thompson's paper on the Treatment of Stricture of the Urethra, at the last meeting of the British Medical Association, the procedure is highly spoken of by Mr. Clement Lucas.

In but a single place only in our home literature have I found this operation described, and that in Bumstead, edition 1879. On page 316 of that work are very clear directions for the performance of the operation, but the author evidently is either not familiar with it or does not appreciate its value, for he describes it

as a method for the *relief* and not as a permanent cure of retention. That this operation gives permanent cure, is proved by Mr. Cock, who says, "I have now under my frequent observation two men, on one of whom I operated twenty-five years ago, and the other twenty, and they are both thankful for their condition."

It is true that, like all other canals lined with new connective tissue, there is a tendency to contract; but so also in an urethra that has once been strictured, no matter what the method of treatment, it is almost sure to recontract; and as it is far easier to manage a straight two-inch canal than a curved six-inch one in the "bummer" element of society, where we find the greatest neglect of strictures and the least desire for fertility, I am not sure but that we would do them a service to change the direction of their streams and place their strictures where they can manage them with greater ease.

The ultimate aim of this operation, however, is not simply a new permanent opening. Like lumbar colotomy, it gives an easy and painless outlet to the contents of its own tract before they reach the diseased parts, which can be kept open as long as the need exists. But, unlike lumbar colotomy, it is not a dangerous operation. It preserves intact the last sphincter, thus leaving its tract under control of the will; and last, whenever the necessity for it is removed, the new opening closes of its own accord.

In no place do we find a better illustration of the value of rest than in an urethra narrowed by inflammation. This principle, however, was long since made use of in the various methods of tapping the bladder; but when Cock's perineal section is thoroughly appreciated I believe that with a few exceptions tapping the bladder for strictures will be a thing of the past. The section is not much harder to do, and is equally as safe as tapping through the rectum; and there certainly can be no comparison between the conditions after the two operations; for nothing could be more disagreeable than to have a tube lying in the bowels for ten days or two weeks. But with the section after the smart of the first few passages of urine there is little or

no inconvenience; but, what is better still, with the section we feel sure of an opening not only as long as the inflammatory thickening lasts, but if all subsequent operations should fail to restore the caliber of the old canal we feel sure that the one we have made will answer all absolute demands for a lifetime. So if you wish to get relief for a longer period than a day or so (which an aspirator will furnish), Cock's operation is always the one you should select.

The question, Can we always do this operation? might here very properly be asked. Is not that portion of the urethra at which it aims sometimes closed by stricture as well as the portions anterior to it? These queries I had best let Mr. Cock answer for me. He says, "However complicated may be the derangement of the perineum, and however extensive the obstruction of the urethra, one portion of the canal behind the stricture is always healthy and often dilated, and is accessible to the knife of the surgeon. I mean that portion of the urethra which emerges from the apex of the prostate—a part which is never the subject of stricture, and whose exact anatomical position may be brought under the recognition of the finger of the operator."

Among the many cases spoken of, I find but one in which the operation failed to relieve the retention, and that was a case of traumatic stricture reported to the Clinical Society of London on October 25, 1878, by Mr. H. G. Howse. The reason that he gave for the failure was, that the contraction of the scar had displaced the urethra from its normal position. Such cases as this, however, must be extremely rare.

The cases for whom this procedure should be chosen are: First, those where rectal tapping used to be practiced to relieve the retention from stricture; second, cases of impassable stricture of the bulbous or membranous urethra (by impassable I mean those cases that have resisted the repeated efforts of the surgeon, assisted by all the improved methods, such as rest in bed, filling the canal with oil and with a tube filled with filiform bougies); third, strictures anterior to the scrotum, for which

neither internal nor external operations can give relief, should be tapped at the point already indicated.

It may seem strange that I apparently exclude the Wheelhouse operation on the perineum; but when you see that Cock's method is far the surest, and that when Wheelhouse's operation is done first it disturbs the landmarks in such a way as to make it uncertain whether it can be done at all, I believe you will agree with me in thinking that Cock's method should always be practiced first. It does not interfere with any operation that you may wish to do afterward. If there is a necessity for restoring the caliber of the old canal, and the rest that Cock's operation gives it does not enable us to slip a guide into the bladder, we may practice the Wheelhouse, Gouley, or any other improved external urethrotomy, with the certainty that even should we be unable to trace the old urethra we already have a safety-valve that will rob it of its wonted dangers.

DANVILLE, KY.

[The operation known as "Cock's," and which consists in "tapping the urethra at the apex of the prostate, unassisted by a guide-staff," was first brought fairly before the profession in 1866 by its author, Edward Cock, Esq., then Senior Surgeon to Guy's Hospital. For full description of the manner in which it is done, see Bryant's *Surgery*, Gouley on *Diseases of the Urinary Organs*, Braithwaite's *Retrospect*, 1866, etc. Bryant is correctly quoted by Dr. Johnstone, but he also says Cock's is a more difficult and dangerous operation than Syme's, being called for in severer cases where the urethra is impervious.—D. W. Y.]

FOREIGN CORRESPONDENCE.

My Dear Yandell:

LONDON, December 15, 1880.

I must begin my letter by taking the usual Englishman's privilege of a grumble at the vagaries of our climate. Any thing more erratic than the present proceedings of the clerk of the weather it would be hard to imagine. We go to bed at night with the thermometer showing four degrees of frost, and with a comfortable conviction that a severe winter is fairly upon us; we awake with disgust in the morning to a drizzling rain, a thermometer at 52° F., and a generally relaxed and listless condition of mind and body. To these violent changes of temperature, as much as to the choking fogs, is due the now universal custom among medical men of sending the delicate or aged to Algiers or the Riviere for the six colder months—a banishment which, I fear, is often inflicted without due consideration of the atmospheric peculiarities of the spot selected, and too often produces any thing but the desired effect. What can be greater folly, for instance, than to send a phthisical patient to Nice? The brilliant sunshine and the glorious blue sky entice him out of doors, and then the piercing wind swoops upon him and clings round him, nor will any heavy cloak or flannels keep it out. On a future occasion I may perhaps have more to say on the subject of European winter resorts, but just now there is “metal more attractive” for most of your readers.

Much attention has been excited lately by the numerous deaths from chloroform. Within the last ten weeks eight deaths from chloroform have been recorded in the *British Medical Journal*, and seven of these have occurred in Great Britain. Very welcome therefore is the news that an important addition has been made to our list of anesthetics by Dr. Lauber, Privat-docent in the University of Jena. Like chloroform when first used, the two substances experimented with by Dr. Lauber are not new, but have been known since their discovery and isolation by Regnault in 1840. They are isomeric bodies, rejoicing

respectively in the names of monochlor-ethylidenchloride or methyl-chloroform and monochlor-ethylenchloride.

Methyl-chloroform is a fluid of 1.372 specific gravity, having an odor like that of chloroform, and boiling at 167° F. A dose of forty to fifty drops, administered to a dog of about twelve pounds' weight, produced complete anesthesia of nineteen minutes' duration; while a dose of about twenty grams, administered to Dr. Lauber by Dr. Von Langenbeck, produced complete anesthesia in five and a half minutes, lasting ten minutes. There was no stage of excitement; respiration was quiet; the pulse was 84, regular, and of good tension. There was no reflex following stimuli, such as pricking with a pin, pulling out hairs of the beard, etc. Vomiting occurred shortly after the return to consciousness, caused, no doubt, by his having breakfasted shortly before; but beyond a feeling of malaise for about an hour he had no other discomfort, and at 6 o'clock was able to make his usual dinner.

The second product, bearing the formidable name of monochlor-ethylenchloride, gives even greater promise than methyl-chloroform. It is a fluid of 1.422 specific gravity, having the odor of chloroform, and boiling at 239° F., and formed either by the action of chlorine on ethylenchloride or of chlorvinyl on perchloride of antimony. Dr. Lauber found that a few drops administered to frogs, guinea-pigs, or rabbits produced rapid and complete anesthesia, with, even in the deepest narcosis, only the slightest diminution of respiration and frequency of pulse. Complete anesthesia, lasting from ten to twenty minutes, was induced in dogs of ten to fourteen pounds' weight by a dose of thirty to fifty drops. In one case the pulse rose considerably; in three others it rose slightly; but in no case was there a fall; while the respirations were increased or very slightly diminished in frequency.

The high boiling point and easy decomposition of monochlor-ethylenchloride by potash, combined with the speedily-occurring and rapidly-passing anesthesia produced by it, led Dr. Lauber to attribute the effects to its component dichlorethylene, which boils

at blood-heat; that is, for this substance he would grant the component action denied on chemical and clinical grounds to chloral-hydrate. Further experiments are promised by Dr. Lauber on man, and more especially with the latter substance. Their result will be awaited with great interest, for it is impossible to overestimate the importance of the discovery, or rather of the practice, as these substances have been known for some time. We are slow in this country to avail ourselves of new ideas, even in surgical matters, owing, I suppose, to our naturally conservative tendencies, and only the strongest facts brought repeatedly before us will overcome the force of habit and prejudice. But it is to be hoped that if the results of Dr. Lauber's forthcoming experiments are satisfactory monochlor-ethylenchloride may speedily take its place among the anesthetics in constant use, when no doubt a shorter if not a more euphonious name may be found for it.

You may perhaps be interested to hear of a new departure in the treatment of purulent ophthalmia. Mr. Bader, Ophthalmic Surgeon to Guy's Hospital, read a paper on the subject before the Ophthalmological Section of the Medical Association meeting at Cambridge, since which I have taken an opportunity of personally viewing his mode of treatment. It consists in the application to the entire conjunctival surface of an ointment of one grain of the nitric oxide of mercury, one fifth of a grain of sulphate of atropia, and one dram of vaseline. When the ointment is applied the patient lies down, and if restless is put under the influence of an anesthetic. (I fear chloroform is used for this purpose, but nitrous oxide would certainly answer.) Next—the eye being well cleansed from discharge with tepid water—with a large soft camel's-hair brush the ointment is freely pushed beneath the upper and then the lower eyelid, so as to touch the entire surface of the conjunctiva. As long as the eyelids are swollen this operation is repeated three times each day, but when once the eyelids open freely one application daily suffices until the cessation of the discharge. Previously to each application of ointment the discharge is washed away with tepid

water. If only one eye is affected, then the non-affected eye must be kept bound up with lint thickly covered with ointment, to be changed every morning, and to be continued until the other eye is well. Mr. Bader says this treatment has had the best results, not only in the case of adults, but also in that of children (aged three, four, and six) suffering from gonorrheal ophthalmia; but it is especially successful when adopted at the very outset of the disease. Mr. Bader says the ointment should be applied by the medical man himself. At Guy's Hospital, however, this would of course be impossible; at least without the special permission of the matron, treasurer, etc.

By the way, apropos of Guy's Hospital, the resignations of Dr. Habershon and Mr. Cooper Forster have been sent in and accepted, while Dr. Hilton Fagge and Mr. Davies-Colley, respectively senior assistant physician and surgeon, have been elected to fill the vacant visiting officers' places. The posts of these assistants, however, rumor says, will not be filled up, owing to the necessity the hospital is under of closing some more of its wards. It is currently reported that this institution, which has already been obliged to close one hundred and eighty beds to the public, in spite of its income of forty thousand pounds per annum, is still further deficient to the tune of ten thousand pounds on the results of the year's operations. A strange but sad commentary this on the late expenditure over the treasurer's house and chapel.

The antiseptic system of surgery, sometimes spoken of as "Listerism," has, after a struggle, struck deep root in Paris, where are now some of its most ardent champions. During the three months' absence, for holiday, of Monsieur Richet, Surgeon to the Hotel Dieu, his place was filled by a Monsieur Richelot, a professor of the Faculty of Paris. The latter employed the antiseptic system of dressing and operating under the carbolic spray to a great extent, and the remarkable successes which he achieved made a very deep impression on those who were able to contrast the results so obtained with the surrounding state of things.

From Paris also comes an interesting little note on the treatment of obscure cases of sterility. Dr. Charrier calls attention to the fact that many women who appear quite healthy and have their genital organs normal, and are married to healthy husbands, remain sterile. He suggests that this sterility is caused by an acidity of the vaginal and uterine mucus, as may be shown by litmus paper; and he considers this condition an absolute bar to conception, as the spermatozoa are quickly killed by the acid fluid. By treatment with alkalies, in baths and drinks, such as Vichy water, and alkaline injections (one thousand parts of water with ninety parts of sulphate of soda and one part of white of egg) the disease is removed and conception follows. This, he goes on to say, explains the incomprehensible results and strange successes following the use of alkaline springs in sterility. He gives several successful cases, and Professor Pajot, an eminent authority, has expressed his agreement with the theory.

A curious and interesting monstrosity is now exhibiting in London in the shape of twin female children of the famous two-headed Nightingale type. Their names are respectively Rosalie and Josepha Blazet, and they were born at Skrejchow (district Mühlhausen) in Bohemia. The mother and father accompany them; they are both well-formed, intelligent people, and were at first much shocked at the extraordinary appearance of their offspring. This feeling has, however, now entirely disappeared, for the children seem in a fair way to bring their parents a handsome fortune. Dr. Augustus Breisky, of the University of Prague, has written the following description of them, which I will give *in extenso*: "The rare deformity of these twin sisters consists in a junction of the posterior walls of the pelvis similar to that of the well-known Hungarian sisters Helena and Judith, and probably to that of the two-headed Nightingale. They may be defined as Pygopagi. Their development corresponds to their age, and they were well fed at the time of my examination. The distinctly separate formation of each child is manifest; sometimes one sleeps while the other is awake, and the voluntary movements and also the reflex movements on mechanical irritation of the

skin of the lower extremities are separate in each individual. In accordance with the junction of the two pelves the labia pudendi majora are united, as well as the genital and anal apertures. The seemingly single urethral orifice is situated beneath a small elevation or fold, originating from a junction of the rudimentary labia minora, and corresponding to a median preputium clitoridis, from which on both sides short labia minora proceed. I have not sounded the urethral orifice, but I have seen urine flowing from it. Beneath it are situated the vaginal orifices lying close together and separated by a longitudinal septum. These again are separated by a narrow perineum from a single lenus. Remarkable besides in these girls is the singular asymmetry of the skulls, which strikes one both in viewing the cranial ovals from above and in viewing both heads, held upright, from behind. Viewed from above the ovals appear flattened on their apponent sides in the anterior circumference of the skull, and strikingly prominent behind. Seen from behind in a vertical direction the flattening of the apponent parts of the skulls is most striking. The children were born, with the assistance of a country midwife, on the 20th of January, 1878, of a mother twenty-two years old, who two years previously had given birth to a healthy girl. Rosalie was born first, with the head foremost. After the expulsion of the upper part of her body an impediment occurred in the process of parturition. The midwife now by strong traction delivered the four feet of the children and the pelvis. After this the upper part of Josepha's body followed, and finally her head. When the medical man who was sent for arrived the birth had been completed. The after-birth came spontaneously, and was not examined. The child-bed of the mother took a normal course."

I saw the little people the other day. They are extremely good-looking children, with bright, intelligent faces, flaxen hair, and pale complexions. They scuttle about the room in a very amusing manner, reminding one of the gait of a crab. One is now decidedly more strongly developed than the other, and is evidently mistress of the situation, as she rather drags her weaker

sister about, who follows her not always willingly. In my presence there was an amusing struggle, as two persons were calling the children from two different sides of the room, and eventually the weaker was dragged off, much to her disgust. They will be exhibited shortly at a meeting of the Obstetrical Society by Dr. Playfair, when a careful examination will be made of them.

Some most admirable charitable work is now being done in London in rather a new direction. A society has been formed called the "Kyrle Society," the members of which devote themselves to providing instruction and suitable recreation for the poor, while a section of the society has for its object the acquiring of open spaces for the public benefit, by laying out and throwing open disused and neglected graveyards and other gloomy and depressing spots. A great feature of the society is that choirs are formed among the members, who get up part-songs and glees, which they render in a most charming manner. They are thus able to provide admirable concerts for the unfortunate inmates of hospitals and work-houses, and so much appreciated are their efforts in this direction that the applications lately received by the society have been in excess of their powers. A large reinforcement of new members has, however, just joined, and they will soon be able to give pleasure to hundreds of poor creatures who know little enough of the brighter side of life. The society has lately painted and decorated some wards in the Westminster Hospital in the modern style of art, and the general effect is most delightful, nor can it fail to have a cheering effect upon the patients located there. Moreover, it is the intention of the society, as their resources permit, to visit the various hospitals, and with the permission of the authorities to paint the walls and ceilings of the various wards in a way calculated to have a refining influence upon the tastes of the poor sufferers.

I fear my letter has been a very rambling one, but there is so much to tell, and I have jotted down the points one after another as they struck me as likely to be interesting to you and your readers.

Reviews.

A Practical Treatise on Surgical Diagnosis, designed as a Manual for Practitioners and Students, by AMBROSE L. RANNEY, A.M., M.D., Adjunct Professor of Anatomy and late Lecturer on the Surgical Diseases of the Genito-urinary Organs and on Minor Surgery, in the Medical Department of the University of the City of New York, etc. Second edition, enlarged and revised. New York: Wm. Wood & Co. 1880. 8vo. Pp. 471.

It must be either a low number published or a very popular work when a first edition of a medical book is exhausted within fifteen months of its issue. Perhaps a discreet author, anxious to please and be useful, but not quite sure of his ability in that rôle, might prepare a book and have published a limited supply, the reception of which would give him a measure of the demand for his mental offspring, and the criticisms it would excite would indicate to him whether it was already perfect or needed emendation, and in the event of the latter would also index the nature of the improvement called for. Quick editions of medical books are always a mystery to the unsophisticated, but are known to be sometimes the occasion of much improvement.

Dr. Ranney intimates that in the fifteen months since the first edition of his *Surgical Diagnosis* was published his mind has undergone something of a revolution in regard to the plan and matter of his book. He has accordingly in this second edition modified the plan, increased the number of pages about one hundred, and expunged the errors of statement of the first edition, and claims to have incorporated all the improvements that he recognized as such pointed out by critics.

The present edition will be found a desirable addition to the surgeon's library; a book that the young practitioner will often realize pleasure and consolation in consulting, and the advanced student find a serviceable source of instruction. The general

plan of the work is that of tabulating the symptoms of diseases in such wise that they may be read in one direction as a continuous statement of the disease in hand, and in another way as contrasting the features of similar diseases as a ready means of diagnosis. This is accomplished by the familiar method of occupying the page by vertical half columns of symptoms of two diseases it is the purpose to present and differentiate, which allows the observer to read either half-page column *down* and get the connected symptomatology of one disease, and by reading *across* the page obtain the contrast of symptoms for diagnosis of two diseases. Dr. Ranney's complete tabulation of this kind is, here as elsewhere, striking and valuable. At the close of each table of contrasts, where there is material for it, there is added a table of symptoms common to the contrasted diseases, which is an instructive finish to the larger table of contrasts, and necessary to a complete presentation of the symptoms of each disease.

Beside these tables the author in this edition of his book gives "a concise and general enumeration of the etiology and symptomatology of the more important diseases to which the attention of the surgeon is most often directed."

Dr. Ranney divides his treatise into eight parts. These are: diseases of the blood-vessels, forty-seven pages; of the joints, forty-nine pages; of the bones, thirty-six pages; dislocations, fifty-four pages; fractures, sixty-seven pages; diseases of the male genitals, seventy-eight pages; of the abdominal cavity, forty-five pages; and of tissues, eighty-five pages. As an introduction to the presentation of the surgical diseases of tissues the author devotes fifteen pages to the phenomena of inflammation in general, summarizing the various theories of it, and making a fairly successful effort to convey the present status of professional knowledge in this exceedingly important pathological process as it is manifested in its sundry forms and in divers situations. Of course in so brief a space only the merest outline can be given, but that may be sufficient to call the serious attention of the surgeon to this item of his schooling, often so imperfect; and the effort will not be without value if it impress him with the neces-

sity of a more thorough study and a better understanding of this almost universal and protean, departure from normal vital activity, the means to do which are made sufficiently plain in the volume.

A pretty full bibliographical record follows the teaching text, and an extensive and admirable index fitly closes the work.

The publishers have done their work neatly and well.

J. F. H.

A Treatise on Diphtheria. By A. JACOBI, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, New York; Physician to Bellevue, Mount Sinai, and the German Hospitals, etc. New York: Wm. Wood & Co. 1880. 8vo. Pp. 252.

An announcement of a book from the pen of Dr. Jacobi carries with it the expectation that it will be a good book; the announcement that Dr. Jacobi has written a treatise on diphtheria leads at once to the conviction that it will be found exhaustive, temperate, and practical, for he has been all his professional life a student, for twenty years a thoughtful writer on diphtheria, and for even more years an attentive practitioner in it and a careful observer of it. The perusal of the book will not disappoint those who anticipate a thorough handling of the subject so far certainly as material and design are involved.

After his preface, dated October 15, 1880, was printed he received the report of the experiments of Drs. Wood and Formad, made to the National Board of Health and printed in its supplemental Bulletin No. 7, touching the effect of diphtheritic poison on certain of the lower animals. Dr. Jacobi reviews so much of this report as relates to the subject-matter of his book and expresses his gratification that the conclusions reached by these investigators accord with the results of his own study and experience as printed in his pages before the publication of the labors of Drs. Wood and Formad.

A history of diphtheria is given in Dr. Jacobi's first chapter,

and this is followed by other chapters, one each on etiology, the manner of infection, contagion, and incubation, symptoms, anatomical appearances, diagnosis, prognosis, and treatment. At the end of each chapter is a summary of the chief points brought out in the text, making a satisfactory means of refreshing the memory of the reader as to the substance of the discussion.

It is not designed to make a full review of Dr. Jacobi's book, but it may be profitable to state that he ascribes a high antiquity to diphtheria, but claims that the modern phase and present name date from 1821, when Bretonneau read his first essay on the subject to the French Academy of Medicine, that diphtheria is preëminently though not exclusively a disease of childhood; that he supposes the contagious matter to be chemical, not organic; that bacteria appear in the diphtheritic humors as an incident, not as a cause; that one attack not only does not prevent a second but rather invites it; that no violence nor number of the attacks exhausts the liability to diphtheria; that in some cases the disease is decidedly local, in others the blood is first poisoned through inhalation; that it is very contagious; that the period of incubation is from two days to two weeks; that its duration is uncertain; that symptoms vary with the part affected; that the fauces most frequently suffer first locally, but the nasal cavities are often early involved and wounds are especially rapidly infected; that all parts of the system may suffer from local or constitutional diphtheria; that sequelæ are sometimes more serious than the original disease; that two morbid anatomical conditions exist, a pseudo-membrane on the surface and an infiltration into normal tissue, and these may exist separately or together; that the membrane is the characteristic that distinguishes diphtheria; that the mortality is not high, but the uncertainties in every case are such as to forbid a positive diagnosis; that there is no specific treatment, but both local and general medication must be founded on the special conditions present; that the membrane must not be torn off nor even removed unless nearly detached; that laryngeal diphtheria is fatal unless relieved by tracheotomy, and this is so rarely successful that it is

to abate the suffering of the patient rather than the hope of cure that drives the author to do the operation; and that this is his position after doing two hundred and sixty-seven operations. The foregoing is intended for a mild syllabus of some of the salient points of Dr. Jacobi's teaching, selected from his several chapters.

Both the experience and the reading of the author concerning diphtheria have been liberal, and he has made such use of his material in the preparation of this book as will doubtlessly establish for it high rank as an authority in the sphere of its subject, and it can be conscientiously recommended to all inquirers as a reliable source of serviceable information; but one can not commend it as without defects or blemishes. The style is somewhat diffuse, not satisfactory in the attribute of clearness, and the language is not at all points devoid of carelessness in selection. For example, the author quotes liberally and fairly *pro et con* the identity of diphtheria and croup, but leaves one to arrive at his own conclusion in the premises only inferentially. Page 157, he says young children begin to improve immediately when their one hundred grams of brandy per day are increased to four hundred grams daily, and on page 231 he says alcohol must be used freely, from two to twelve ounces daily, referring to the preceding page for confirmation. Now there is a great difference between alcohol and brandy, to say nothing of the language in one place specifying young children—a very indefinite term itself, and in the other making no specification of age, which should signify adults. There is nowhere in the volume any attempt at giving the natural history of diphtheria, which is a serious defect in the light of the knowledge and needs of the present day, but by implication we are led to infer that all good endings of diphtheria are due exclusively to the medication, a lesson unprofitable or worse to inculcate at least in the minds of the student and young practitioner.

The volume has a full and satisfying index, and Wm. Wood & Co. have filled the rôle of neat and tasteful publishers.

A Treatise on the Diseases of the Eye. By J. SOELBERG WELLS, F.R.C.S., Doctor of Medicine of the University of Edinburgh, Professor of Ophthalmology in King's College, London; Ophthalmic Surgeon to King's College Hospital; Surgeon to the Royal London Ophthalmic Hospital, Moorsfields. Third American from third English edition, with copious additions by CHAS. STEDMAN BULL, A.M., M.D., Surgeon and Pathologist to the New York Eye and Ear Infirmary, Lecturer on Ophthalmology in Bellevue Hospital Medical College. Illustrated with two hundred and fifty-four engravings on wood and six colored plates, together with selections from the test-types of Professor E. JAEGER and Professor H. SNELLEN. Philadelphia: Henry C. Lea's Son & Co. 1880.

When the first edition of this classic volume appeared in America it was pronounced by a reviewer, who was competent to judge, to be the best work extant on diseases of the eye. It is safe to say that this the third edition warrants the same high praise. There is really no work which approaches it in adaptation to the wants of the general practitioner, while the most advanced specialist can not rise from a perusal of its ample pages without having added to his knowledge. The American editor, Dr. Bull, won his spurs in ophthalmology some time back. His additions to the work of the lamented Wells are many, judicious, and timely, and in just so much have added to its value. The publishers have issued the volume in a style in keeping with its contents.

The Medical Record Visiting-List for 1880. New York: William Wood & Co.

This is a very handsome pocket record; the gilt edges, the fine paper, and especially the variegated ruling, making it very attractive. This is the first year of publication. It contains all that is necessary for properly recording professional visits, besides a posological table, the metric system, poisons and their antidotes, etc.

Clinic of the Month.

TREATMENT OF SPRAINS BY MASSAGE.—Dr. Bérenger-Féraud gives an account of four hundred sprains which he treated successfully with massage. He speaks as follows:

Let us suppose that we have a sprain of the foot. After we have arrived beside the wounded—and note in beginning that the nearer massage is to the moment of the accident the shorter the treatment—set him upon a chair if he is up; seat ourselves in front of him; and put his injured foot upon our knees. If the subject is lying down uncover him and make a diagnosis. The diagnosis being established—that is, when we have found out that we have to do with a sprain, slight, medium, intense, or complicated—we proceed to the manipulations. Begin by making, on the dorsal face of the foot, going from the root of the toes to the leg, following the direction of the extensor tendons, passes as light as possible with the pulp of the four last fingers, anointed from time to time with some fat body—olive oil, for example. These frictions, which ought always to be directed from the extremity toward the root of the limb, and never in a contrary direction, are extremely light; they begin quite far above the painful part, and are prolonged as far below. They ought not to be painful; and in the cases in which, in spite of their extreme slightness, the subject finds them too painful, it will be necessary to begin at some other region, leaving the dorsum of the foot to return to it when the sensibility has been a little blunted by the massage.

Little by little the pressure is augmented, and at first the pulp of the four last fingers of both hands, then that of the two thumbs, intervene, according as the contact is less painful for the patient. A few minutes after beginning, in general, one may press very notably on a place which at first could not support the slightest friction without suffering. Soon after it is a veritable friction, quite strong, that we may practice, taking care to have recourse to the fat body to protect the skin of the patient, which would not be slow to become excoriated if it were kneaded dry, and the pulp of the fingers feels a sort of peritendinous edema which one makes mount upward little by little above the ankle, as far as the fleshy portion of the extensors of the toes and of the anterior tibial.

According as the contacts are less painful, we cause slight movements to be executed upon the articulations in the neighborhood of those which are injured, and one arrives thus little by little at those in which the sprain has spent most directly its effects. These movements are very gradual; imperceptible at first, they go on, little by little, increasing until at the end of the *séance*, which it is necessary to prolong willingly, pain being always very carefully avoided, we cause the part to execute all its physiological movements in their greatest amplitude.

At certain moments we may feel under our fingers substances like small nodosities, more or less voluminous, large as a lentil—nodosities at first fixed, afterward movable, of which the patient is conscious, and which give an impression of pain when pressed a little forcibly. It is necessary to pass the fingers with persistence over them, taking care to do so lightly enough not to make the patient suffer; and moreover they must be mobilized little by little—at first chasing them very gently, afterward as far as the fleshy portions of the extensor muscles of the toe and the tibialis anterior.

At the end of a time which varies from one to five minutes friction may be applied with greater and greater force, and soon strong pressure provokes no sensible pain. This is the moment to leave this portion of the foot to knead either the more external part or the internal part, by passing them along the border of the foot as far as the malleolus, which is turned in such a manner as to follow either the tract of the peroneal tendons or that of the muscles of the posterior tibial region. We act upon each of these regions, as I have said previously, going from the lightest rubbing to vigorous friction, taking as a guide the impressions made upon the patient, and taking great care not to hurtle against an osseous eminence.

The *séance* ought to continue until all feeling of distress and pain have disappeared. The operation terminated, a retentive apparatus is applied. (Canadian Journal of Medical Science.)

CYSTORRHAGIA.—To prevent the hemorrhage which is so likely to occur after retention of urine, Dr. Gouley in a recent clinical lecture recommends that an over-distended bladder be emptied very gradually. Draw off eight or ten ounces through a soft rubber catheter during five minutes, then wait an hour before drawing any more, and so continue even if twelve to fourteen hours are consumed in emptying the bladder entirely. If the urine is very offensive, draw off ten ounces and inject an

equal amount of warm water containing one scruple of biborate of soda. Then draw ten ounces of the contents of the bladder and again inject the solution, and so continue until the contents of the bladder are no longer fetid. Then proceed to empty it gradually, but never allow the over-distended bladder to be evacuated at a single catheterism. If cystorrhagia occurs Dr. Gouley recommends the following treatment: After all the urine has been drawn, introduce a soft catheter and leave it in the bladder for twenty-four hours, thus allowing perfect drainage. The drainage allows the muscular wall to contract firmly, and the contraction alone will stop the hemorrhage in most cases. If the hemorrhage is severe and continuous it will be necessary to draw off the clots by suction made with an aspirator attached to the catheter. Before doing this inject a warm solution of borax and only withdraw the same amount that has been injected. As soon as the clots are removed the bladder will contract and the hemorrhage will cease. Injections of tannin or alum are only to be used as a last resort, as they may set up a general cystitis. The administration of the fluid extract of ergot by the mouth will aid in the arrest of severe hemorrhage, but is needless in mild cases where simple drainage will suffice.

A NEW REMEDY IN DIPHTHERIA.—Dr. Guttman, of Cronstadt, writes in *Berlin Klin. Woch.*:

I prescribe pilocarpin in violent pharyngeal cases, angina aphthosa and tonsillaris, always with most happy results, the disease yielding in a short time. In two cases of violent tonsillitis, in which the tonsils were so swollen that water could be taken only with great difficulty and scarification was positively indicated, not only did the swelling disappear, but the entire group of inflammatory symptoms, the one in twenty-four hours and the other in thirty-six.

In the few cases of membranous croup that have fallen into my hands during the past fifteen months, pilocarpin has proved a faithful ally, and I believe it will prove as effective as in diphtheria of the fauces.

Two cases of laryngitis stridula yielded promptly to the same drug, which is safer and more convenient than the usually prescribed emetic.

Others have used pilocarpin under my advice, and agree with me

in maintaining its excellence in diseases of the nature described. In the administration of this remedy I combine pepsin to combat the gastric catarrh usually present. My formula is as follows:

R. Pilocarpin muriat gram 0.02—0.04;
 Pepsin gram 0.6 —0.8;
 Acidi hydrochlor gtt. ii;
 Aquæ dest grams 80.0.

M. Sig. A teaspoonful hourly for children.

For adults:

Pilocarpin muriat gram 0.03—0.05;
 Pepsin gram 2.0;
 Acidi hydrochlor gtt. iii;
 Aquæ dest grams 240.

M. S. Hourly, a tablespoonful.

I have never observed any undesirable effects of the drug even when it has been continued until complete recovery, possibly because I give a small amount of generous wine after each dose. (St. Louis Courier of Medicine.)

COLD PACK AND MASSAGE IN THE TREATMENT OF ANEMIA.—We extract the following from the recent work bearing the above title by Mary Putnam Jacobi, M.D., and Victoria A. White, M.D., and commend it as containing the best expression yet given on this most interesting subject:

The administration of iron in anemia encounters the following difficulties:

1. The frequent occurrence in anemic persons of gastro-intestinal hyperemia, which interferes with the absorption of iron, and is itself easily aggravated by its presence.

2. Ordinary food contains enough iron for the maintenance of the blood in health, but in anemia this ceases to be appropriated. Whatever hindrance exists to such appropriation, must be overcome before the excess, given therapeutically, can be taken up.

3. The construction of the blood corpuscles demands oxygen and albumen as imperatively as iron. To judge from the researches, now classical, of Quevenne, Miahle, and others, iron is mainly absorbed in combination with peptone and in proportion as it produces its primary effect of increasing the secretion of gastric juice and also the amount of peptone dissolved in it. But this effect is not unfrequently prevented, and can not be produced unless other therapeutic agencies are made to coöperate with the iron.

Anemia is a morbid state, characterized by an inability on the part

of the tissues to condense oxygen and to store albumen in sufficient quantity. The inability is frequently congenital, or acquired in early childhood. As a first consequence the reserve material required in the elaboration of force is every where deficient. As a second consequence, this elaboration of force is deficient—there is a generalized functional debility.

The atrophy of the blood corpuscles, or of their functionally active portion, hemoglobine, is not an isolated lesion, and alone characteristic of anemia. It must rather be considered as the most easily demonstrable illustration of a disorder common to all the organized albuminoids of the body.

The cold pack* meets the following indications for the treatment of anemia thus understood:

1. In the first moments of application it produces the same stimulation of the peripheric nerves as may be caused by any application of cold—shower-bath, douche, plunge-bath, etc.

2. It impresses upon the mass of circulating blood a profound movement of oscillation, first from without inward, then the reverse. The effect is different in the two periods.

During the inward movement of the blood the tension of the abdominal blood-vessels, which has at first been lowered through the agency of the depressor nerve, at first relaxed, becomes raised by the increased volume of blood driven to them, and circulating through the abdominal viscera, not with increased rapidity but with increased force. As a consequence there is:

- a.* Increased metamorphosis of albuminoid substances in liver and spleen, resulting finally in greater production of urea. When iron is absorbed with the albumen there seems to be initiated in these same glands more abundant regeneration of red corpuscles.

- b.* Increased consumption of stored or latent oxygen in the series of oxidations culminating in urea. Hence, during the period following the pack probably increased absorption of oxygen, coinciding with diminished oxidations. The latter are indicated by diminished production of urea. (Of carbonic acid also?).

- c.* Possibly increased movement of assimilation of now decomposed albumen (and other food), coinciding with the movement of increased decomposition, affecting that portion of circulating albumen which has originated the urea. Both movements immediately dependent on an increased force of elementary, intervascular circulation.

* Made by enveloping the patient in a wet sheet, this surrounded by a dry one, and that by six blankets, the whole drawn tightly around the body. The patient to be kept in this from thirty minutes to one hour.

d. Probable assimilation of the non-nitrogenous portion of the decomposed albumen.

e. Increased elimination of water from the kidneys, and hence, aspiration of excess of water from anemic tissues.

f. During this elementary outstreaming of water, facilitated washing away of acid fatigue-products from nerves and muscles.

This latter (calculated) effect to be attributed partly to the second half of the movement of oscillation of the blood mass. During this secondary movement from within outward, we have:

A. Diminution of passive hyperemia in the elementary mucous membrane.

B. Increased nutritive absorption, partly in consequence of allayed hyperemia, partly as the direct expression of a movement of fluids outward from the alimentary canal.

C. Afflux of blood to muscles, enabling them to increase their store of contractile material, and thus become more capable of exercise.

D. In this afflux, and on account of thermic irritation of the peripheric nerves, increased production of heat. From the coincident immobility of the body, and the arrest of radiation, a certain proportion of this increment saved. (The increment of urea is probably derived in part from increased chemical changes of circulating albumen in the muscles, during the production of heat).

E. In the production of heat in response to a physiological stimulus, the nervous system, through the portion involved in the reflex mechanism, is especially stimulated, and the stimulus is immediately followed by special provisions for repose.

F. During the afflux of blood to the periphery, blood is drawn from the nerve-centers, which are thus placed in a condition analogous to sleep—a condition favorable to repose and to nutritive assimilation. The establishment of an equilibrium of temperature is followed by a cessation of chemical activity in the muscles, and necessarily by sedation of the nerves. These effects are of especial symptomatic importance in irritable anemias.

3. During the pack the radial pulse is slackened and its tension lowered. We may infer increased facilities for nutrition in tissue-elements hitherto irritated rather than nourished by a blood stream imperfect in quantity and too rapid in duration.

Massage intensifies and prolongs some of the effects of the pack, when this has previously been administered.

Given alone it is much less effectual than the pack, because its influence is less complete, and especially because it is less certain to determine blood to anemic muscles.

In cases of "neurasthenia," or of hysteria, the cold pack is only beneficial in proportion to the coexisting anemia. If this is not marked in proportion to the neurotic element the pack may be useless or even injurious.

The cold pack is decidedly dangerous if administered too near to periods of abdominal hyperemia, whether physiological, as digestion and menstruation, or pathological, as in lurking peritonitis.

MORPHIA AND CHLOROFORM.—Prof. Bartholow in one of his recent Cartwright Lectures, thus speaks of the antagonism of morphia and chloroform:

As paralysis of the heart or of the respiration, or possibly by the simultaneous depression of both functions, is the mode of death from chloroform and other anesthetics, it is certainly very desirable that we should have an agent which will antagonize and prevent this fatal tendency. In the subcutaneous injection of morphia I am entirely convinced that we do possess such an agent; and it is a matter of great surprise to me that surgeons have not more generally availed themselves of the indisputable advantages of mixed anesthesia. It was about the same time that Claude Bernard and Nussbaum demonstrated the great utility of the method of inducing anesthesia by the subcutaneous injection of morphia combined with the inhalation of chloroform—Bernard administering the morphia a few minutes before commencing the inhalation, and Nussbaum not until the latter was well under way. Morphia and chloroform act on the same cellular elements of the brain, and agree in the production of anesthesia, but they are opposed in their action on other structures and organs—an opposition which renders their combined use safer. When morphia is injected before the inhalation of the anesthetic is begun (which is the preferable method on account of the manner in which it facilitates the latter), the irritability of the bronchial mucous membrane is so far overcome as to permit the inhalation to proceed quietly; the stage of excitement is prevented, and consequently the danger from asphyxia which sometimes accompanies this; the nausea and vomiting are also obviated, and the anesthetic effect is prolonged without the aid of further inhalation. In addition, the nausea and vomiting, after-pain and depression which follow the use of anesthetics, as well as the dangerous syncope which sometimes results, can be prevented to a great extent by this method. If the morphia and the chloroform inhalation be carefully and properly combined, it is possible to produce anesthesia without loss of consciousness, a point in regard to which Bossis says,

in his thesis on this subject, "There may be obtained in man with a little attention, by the combined action of chloroform and morphia, a state of complete insensibility to pain, with preservation to a partial extent of the intelligence, tactile sensibility, auditory and visual, and of the voluntary movements. From the practical point of view, the analgesia obtained by the combined action differs completely from the demianesthesia caused by the employment of chloroform or ether singly, in that it is not preceded or accompanied by a period of hyperesthesia with violent excitement, and the tendency to exaggerated reflex arrests of the heart and after-syncope."

From the practical experience thus far accumulated there can be no doubt that morphia, used after the method of Bernard, greatly facilitates the induction of anesthesia and materially diminishes its dangers. I have maintained that for this purpose atropia in combination with morphia should be preferred to morphia alone, on account of the greater stimulating effect thus produced upon the cardiac and respiratory centers. It might perhaps be supposed that atropia alone would be better than morphia; but it must not be forgotten that stimulation is inevitably followed by reaction, and morphia has a power of continued support which atropia does not possess. When administered together under the circumstances, the evil effects of both are antagonized, and the power of both to support the heart and respiration utilized. The quantity of morphia employed should rarely exceed one fourth of a grain, and of atropia one hundredth of a grain.

CATARRH OF THE NASAL PASSAGES.—At a late meeting of the New York Academy of Medicine a paper was read by Dr. F. H. Bosworth upon Catarrh of the Nasal Passages, which contained the following practical suggestions:

The douche affords only a slight degree of relief. The fluid flowing slowly and only over a small portion of the passages affected, does not reach all the hypertrophied and diseased mucous membrane, nor does it thoroughly cleanse it of accumulations. The atomizer enables us to make applications to the whole nasal cavity, and by its use we can control to some extent the morbid process, lessen the secretion, and arrest the disease if the case be a mild one. Powders of all kinds rank with the spray. But with neither is a permanent cure accomplished, as a rule. Topical medication to the hypertrophied membrane usually fails. In the use of destructive agents lies the only plan of treatment of any permanent service. Forcible evulsion of the tissue is too painful and bloody. Chemical agents are therefore to be

used. Nitrate of silver, advocated by some, will destroy the tissue, but at the same time stimulates the parts beneath and sets up a further morbid action. Nitric acid, though free from stimulant properties, is liable to erode too deeply and cause ulceration. Chromic acid is not open to this objection. But of all the chemical agents I prefer glacial acetic acid. It destroys the superficial layer of hypertrophied membrane, and by its absorption seems to control the morbid activity of the deeper layers. It may cause irritation and swelling, but this rapidly subsides, and there are soon voided shreddy masses resembling croupous membrane, after which the symptoms subside. I apply the acid on a flat probe, wrapped in cotton wool, only one side of the probe being wet with the acid, so that the septum of the nose is untouched. The probe is swept through the nasal passages in such a manner that the face of the inferior turbinated bones is touched in its whole length. The application is painful, but the pain is instantly relieved by throwing in from an atomizer a spray composed as follows:

℞ Acidi Carbolici gr. j;
 Sod. Biboratis
 Sod. Bicarbonatis } āā gr. ij;
 Glycerinæ ʒj;
 Aquæ ad ʒj. M. (Dobell.)

This solution is also used as a cleansing agent before the application of the acetic acid, and is best applied by means of the douche. If the pain is not relieved by the spray, a solution of morphia may be applied with the atomizer. The application of the acid is to be repeated at intervals of a week, and during the interval the solution is to be used as a douche twice daily. As the disease succumbs to the treatment the interval may be extended to two or three weeks. By this means we can remove permanently most of the features which render catarrh a source of discomfort. In extreme cases, where the hypertrophied membrane forms projections from the turbinated bones and encroaches greatly upon the nasal cavity, the galvano-cautery or an écraseur of steel wire may be used to remove the tissue.

In the discussion which followed, Dr. J. H. Douglass expressed the opinion that catarrh was mainly a constitutional disease, and was to be treated as such, local applications being limited to the use of the douche, heat, and bland agents like vaseline. Dr. Andrew H. Smith said that the douche could be used very efficiently, and the stream would reach all parts of the nasal passages if projected with some force. He had used, in

treating these catarrhs, nitrate of silver in the form of powder, combining ten to forty grains with one dram of sulphate of potash and one ounce of subnitrate of bismuth. Such a powder could be blown into all parts of the nose and remain in contact with the mucous membrane. He considered acetic acid as too painful an application for general use. Dr. Asch had applied Dobell's solution as a cleansing agent, as all local applications were useless unless the mucous membrane was clean. He applied a solution of nitrate of silver (twenty to forty grains to one ounce of water) on a brush, and had been able to control most cases of catarrh by this means. Dr. H. Knapp thought it best to abstain from injuring the mucous membrane, and resorted to mild local applications daily for a long time, with good results, especially in children's cases. (Chicago Medical Review.)

THE ADMINISTRATION OF ANESTHETICS.—Robert Saundby, M.D., Edinburgh, M.R.C.P., late Chloroformist to the General Hospital, Birmingham, whose experience in the use of anesthetics has been large, thus sums it up:

It may be assumed that the anesthetic agents usually employed in practice are ether and chloroform. But these agents are neither satisfactory nor safe unless properly administered with due discrimination of the cases suitable to each. I shall try to state accurately what are the methods I use, the precautions I have found necessary, and the errors I have learned to avoid in the administration of anesthetics; and I hope by clearly enunciating my own views to raise certain questions in a definite manner, which shall be capable of being affirmed or denied, but at any rate must be answered.

The agent to be preferred. As a general rule I prefer ether, because I believe it to be safer, the public believes it to be safer, it is a perfectly satisfactory anesthetic, and its after-effects are less depressing than those of chloroform. The apparatus I employ is a towel folded lengthwise, with three or four thicknesses of paper between the folds, made into a cone by twisting it in one hand and fixing it with a few safety-pins.

Preliminary arrangements. No solid food should have been taken for at least three hours before the time fixed for the administration. I can recommend the plan proposed by Mr. Priestley Smith of admin-

istering a dose of chloral hydrate an hour before. Do not give brandy or any other stimulant just before administering ether; it is unnecessary, will probably be vomited, and introduces another factor into the conditions which we should try to keep as simple as possible. Examine the chest and make inquiries as to cough in all cases. Inflammation of the lungs or air-passages forbids the use of ether. The vapor of ether irritates healthy lungs, often to an excessive degree, and sometimes causes a slight bronchitis for a day or two, while occasionally it gives rise to fatal edema of the lungs, even where no previous disease existed in these organs. It is therefore plain that all inflammatory conditions of the lungs are likely to be made worse by ether. Chloroform is to be preferred in all such cases. Cardiac disease *per se* does not contra-indicate ether, as the drug aids a weak heart. In aortic incompetence with badly-filled arteries the circulation becomes better during the administration of ether. In mitral disease the case is somewhat different. It must be remembered that ether frequently causes spasmodic dyspnea, which ordinarily need cause no alarm, and calls for nothing but temporary suspension of the administration, but during which there is great venous turgescence, and the right side of the heart is necessarily overloaded with blood. So that whenever I have reason to believe that the right side of the heart is weak and dilated I should prefer chloroform to ether. The same would hold good of dilatation of the right ventricle apart from mitral disease.

Fractures, herniæ, and other conditions in which complete muscular relaxation is required are cases in which, *ceteris paribus*, I should use chloroform. Operations about the face can sometimes be performed only with difficulty, or not at all, while ether is being administered; in these chloroform must be employed. Young children take chloroform with such ease and safety that it is to be preferred for them.

Method of administration. The orifice of the cone should be large enough to cover the lower two thirds of the patient's face and take in the chin and lower jaw. Have the patient lying down with his shoulders a little raised, and his head not much higher than his shoulders; the pillow should be firm and flat; unfasten any thing that is round the patient's neck; ask him to turn his head with the right cheek on the pillow, to shut his eyes and mouth, to breathe through his nose; tell him to try and go to sleep, and assure him that the ether will be given him cautiously. Pour about an ounce of ether into the cone, and approach it slowly toward the patient's face; with a little encouragement he will soon submit to having it brought quite close, for partial anesthesia is rapidly induced. When once it is close to his face it

should not be removed for some minutes, in spite of any struggles or protests. Fortunately patients rarely recollect what occurs at that time if the cone has been approached gradually. The ether should be given liberally, as atmospheric air is being excluded, and the patient is respiring nothing but ether vapor. Stertorous breathing is a sign that the patient is "over," and that the operation may begin. If there is much lividity, stop giving ether for a short time and the natural color will soon return. The ether must be given almost continuously throughout the operation. Stertorous breathing is not a warning of danger. On the contrary, I like to hear this noisy breathing, as I feel sure my patient is going on all right.

Cautions. It is absolutely necessary that one person should do nothing else but administer the anesthetic. He should never leave his post to assist or perform other duties. His business is to give the anesthetic and to watch the breathing. He should let his own breath, as it were, hang on the breathing of his patient, so that he can not breathe himself till his patient breathes. In this way he will be able to detect the slightest irregularity. With ether there is often some spasm, and respiration stops for a time, but a tap on the chest or rotating the head starts it again as a rule. If inspiration seems difficult, remove any mucus from the fauces with the finger, draw out the tongue with a pair of artery forceps and pull it well forward so as to open the glottis. If this does not succeed, artificial respiration must be resorted to while the tongue is still drawn forward; but it is satisfactory to say that I have never yet needed to have recourse to it.

The color of the skin of the ears is a good index to the state of the circulation. If these are livid the administration should be stopped temporarily.

After the operation. It is prudent not to leave the patient until he has shown signs of returning consciousness. This may be hastened by sponging his face with cold water, or slapping it gently with a wet towel, not so roughly as to cause marks. Sometimes holding the nose provokes a long inspiration through the mouth, followed by the sudden return to consciousness. This maneuver is of no use when ruder measures fail, but it may precede them, and is often successful.

Where chloroform, for any of the reasons given above, is to be preferred, I administer it on a towel folded square. The preliminary arrangements and precautions are much the same as in the case of ether; but the patient requires if possible more careful watching. The reflex sensibility of the eye must be tested frequently: when it is abolished the operation may commence, and the chloroform should be administered with caution. Stertorous breathing is a warning to sus-

pend the administration. Should the respiration stop, the tongue must be drawn out, and artificial respiration commenced at once. The respiration must be watched continuously. The pulse may be disregarded, as it gives no timely warning of approaching danger. *Although chloroform does not require to be administered continuously, it is not less necessary to continue to watch the respiration, even though no chloroform is being given.* Accidents often happen from disregard of this precaution. The chloroform may be safely poured freely on the towel, but this should be cautiously approached to the face, until finally the fingers of both hands press its lower edge against the margin of the jaw, while the surface of the towel forms an angle of forty-five degrees with the face.

I have had two deaths from anesthetics—one from chloroform and one from ether. The former was a case of gummatous disease of the larynx, for which tracheotomy was performed when the patient was nearly moribund from asphyxia. The other was from acute edema of the lungs supervening some hours after the administration of the ether. Both were hospital cases. In the numerous administrations I have had in private I have never met with a case which has given me any cause for alarm, though many have given me much anxiety.

The points which I desire especially to insist upon are: 1. Ether is to be generally preferred as an anesthetic; 2. Inflammatory affections of the lungs and the air-passages absolutely contra-indicate its employment; 3. It should be the sole business of one person to administer the anesthetic during an operation; 4. The breathing must be watched so long as the patient is under the influence of the anesthetic, whether it is still being administered or not.

ULCERATIVE KERATITIS.—J. R. Wolfe, M.D., Lecturer on Ophthalmology at Anderson College, Glasgow, speaks in the following simple way of this affection and its treatment:

In this disease we have the softening and elimination of the corneal substance. This may either assume the sthenic or the asthenic form. The sthenic form is accompanied with ciliary pain, photophobia, lachrymation, and pericorneal inflammation. Oblique illumination shows the disappearance of the epithelium. The border of the ulcer is grayish and swollen. In the asthenic ulcer there is very little or no ciliary pain, neither photophobia nor lachrymation.

Causes. Debilitated subjects and scrofulous children are generally liable to it. Injuries of the cornea, however slight, may in some cachectic subjects generate an ulcer. Conjunctivitis, acute or chronic,

when deep, may also, by interfering with the nutrition of the cornea, cause ulceration.

Prognosis is more favorable in the acute than in the chronic form, when it may entirely disappear. In the indolent form there is a risk of a white cicatrix (leucoma) or fistula, and the iris may adhere to the cicatrix (leucoma adherens).

Treatment. Local—Atropine; calomel insufflation; warm fomentations; compress with bandages. The less you open the eye the better. All cauterization, and teasing the cornea with washes, I think prejudicial and ought to be avoided. In the asthenic type I use the steam cautiously with the view of producing reaction. Indeed, I think this remedial measure worth all the remedies combined.

When a fistula has formed which proves obstinate, an iridectomy should be performed. I have seen a fistula of twelve years' standing which used to be a source of great annoyance to the patient, bursting periodically, upon which an iridectomy acted like a charm. The operation should be done whether there is a hernia iridis or not. When there is a prolapse I never interfere with it, but I make an artificial pupil in a line opposite to it.

General treatment. Tonics.

THE SULPHO-CARBOLATES.—Dr. Withers thus writes (Dublin Journal of Medical Science) of the value of this class of remedies as used in the Dublin Fever Hospital:

Cases of scarlatina on admission receive a tepid bath, and the sulpho-carbolate of soda in solution. The diet is milk. The dose of the sulpho-carbolate is ten grains every two hours; five grains for children. Thirty-one cases of scarlatina have been treated, more than one half being of the simple form of scarlatina, which is said by some to get well without any treatment; however, during the progress of the fever, advantages in the above treatment have been noticed which will place this medicinal agent far in preference to others. Of these thirty-one cases there were three deaths, a mortality of 9.7 per cent. This I think is a low death-rate, when we consider that about one quarter of the cases were of an anginous or malignant character. The results of this special treatment in these thirty-one cases have been almost unvaried. The absorption of the sulpho-carbolate of soda into the system is noticed at about the end of twenty-four hours, by the evidence of an almost complete cessation of throat symptoms. The tonsils are of a dirty white color, as if touched with a mild caustic, and their enlargement is observed to diminish quickly. The tem-

perature and general fever lessen, and the patient proceeds rapidly to convalescence. In no case have I noticed any dropsy, and in the majority there was very slight, if any, desquamation. I have, therefore, every confidence in the substitution of the sulpho-carbolate as an antiseptic antipyretic in the place of the former diaphoretic and expectant treatment of scarlatina. It has been most satisfactory, the recovery of the patients being rapid and complete, and the mortality rate being very low.

The sulpho-carbolate of soda in a few cases of smallpox has been administered with marked success—twenty-five in number, and of them we had two deaths, one a young man in whom the disease was confluent and hemorrhagic, and the other a child of four months old, ill with marasmus, and who received the variolous poison from its wet-nurse. Thus a death-rate of eight per cent. In a like number of cases treated in 1878 by other means it was sixteen per cent. The internal treatment is similar to that of scarlatina, but occasionally an alcoholic stimulant or a sedative is required. It has been found that when the patient is seen early and treatment at once commenced then the primary fever is lessened, the throat symptoms which are so troublesome, when the soft palate and fauces are covered with pustules, disappear rapidly—often in twelve hours; and what is more remarkable in none of the cases so treated has any secondary fever been observed. I can not say that the internal administration of the sulpho-carbolate has any effect on the scars of the pustules.

In acute tonsillitis the sulpho-carbolate of sodium was eminently useful, the hypertrophy of the tonsils rapidly subsided, rarely was there any suppuration, and power of swallowing was restored in from three to four days. In this affection I think the iron salt will prove most useful, as I have noticed cases where the patient was much prostrated—in fact in a typhoid condition; and I believe that the administration of the iron preparation will be more satisfactory than the sodium salt, although the latter is very beneficial when combined with quinine.

TREATMENT OF RINGWORM.—A writer in the *British Medical Journal* says:

I think your readers will be glad to hear of a remedy which I have recently used with complete success. It is the active principle of goa powder, chrysophanic acid, in the proportion of one dram to one ounce of vaseline. The result has been the rapid destruction of the fungus, and consequently a complete cure.

ANGINA PECTORIS.—Prof. Potain, in a clinical lecture (*Gaz des Hôp*) observed that he believed that three forms of this affection can be distinctly recognized, all characterized by agonizing substernal pain, propagated in the paroxysmal form to the upper extremities. It differs from ordinary dyspnea, as there is no oppression (properly so-called), but a kind of constriction of the parietes of the thorax.

1. The first form, symptomatic of a lesion of the coronary arteries, may be regarded as terminating fatally in death. The lesions may vary somewhat, but Prof. Potain agrees with Jenner that they usually consist in obstruction of the coronaries. In thirty-six cases lesion of the coronary arteries was observed. The mere existence of atheroma will not explain the occurrence of angina, unless actual narrowing of the vessels be also present. The symptoms of this form present special characters. The paroxysm supervenes on difficult digestion or on movements made during digestion, but is never declared while the patient is in a state of repose. It is also accompanied by radiations of pain along one or both of the upper extremities, and especially the left.

2. The second form differs completely from the first, inasmuch as it is not connected with any lesion of the coronary arteries, but assumes the characteristics of a true neurosis. It is met with either in the subjects of rheumatism or in nervous persons; is of much less importance than the other form; and occurs oftener in private than in hospital practice. It comes on under the influence of cold and damp. Thus, a young woman, who, after having been heated in dancing, had exposed her uncovered neck to an open window, was seized during the night with a fearful paroxysm of sternal constriction with irradiation of the pain down to her left hand, which, after lasting for some hours, disappeared to recur nightly for more than a week. The paroxysms were then separated by longer intervals until they entirely disappeared, leaving no trace behind. No cardiac or other appreciable lesion had preceded the attack. In this case the paroxysms did not arise under the influence of movements, but came on spontaneously during the night, "at what I may term the time of false croup." Moreover their duration was longer, as they persisted one or two hours, and even sometimes longer; the patient in the intervals enjoying perfect health, being able to ascend or run with the greatest facility. On the other hand in symptomatic angina, when the fit is off, the patient is still unable to ascend the slightest acclivity, while the paroxysm never

comes on when he is in a state of repose, and scarcely lasts for some minutes. In this second, rheumatismal or nervous form, Prof. Potain has never met with a fatal case, so that the prognosis is entirely different. So is its etiology; for while symptomatic angina is especially met with in men of a certain age, and in gouty subjects, this second form particularly appears in young and nervous women.

3. In the third form while the accidents are the same the circumstances are quite different, the origin and true cause of the disease being generally found in an affection of the heart of an old date. This is a dilatation of the organ, whether it be the result of chronic disease of the lungs (sclerosis, emphysema, etc.), primary gastric disturbance, or a pulmonary affection complicated with gastric disturbance. The patient is seized after a meal, and especially if this meal has been followed by rapid walking, with a deep-seated sense of anguish and oppression and suffocation, without true dyspnea. The pain, which is sometimes substernal, is much oftener seated in the cardiac region itself (pain in the heart, as it is called), and is accompanied by a feeling of plenitude and not of constriction, and by a numbness which often irradiates along the left upper extremity. Although no statistics on the subject exist, this form would seem to be of more frequent occurrence than the second, and perhaps even than the first. While the prognosis, however, of the first is fatal, and that of the second is generally favorable, the symptoms of this third form are mere epiphenomenon, which of itself does not constitute the true danger.

In the treatment of the first form of the affection there is unfortunately little to be done, especially during the paroxysm, the short duration of which hardly allows of intervention. If, however, it is at all prolonged morphia injections may be useful. In the intervals Prof. Potain has derived benefit from the iodide of potassium, which exerts a favorable influence on chronic arteritis; and arsenic or the bromides may be recommended on account of their action on the nervous system. The second form requires quite a different treatment. During the paroxysms, external derivatives (blisters and sinapisms) and antispasmodics (camphor, assafetida, and ether) should be resorted to; and in the intervals vapor or sulphurous baths, tonics, chalybeates, country air, etc. In the third form the treatment must vary according to whether the disease result from gastric disturbance or some pulmonary lesion. But, in any case, one of the most immediate indications is absolute repose—and that more absolute perhaps than in this first form, if a cure of the affection is to be sought for.

AMBLYOPIA FROM ABUSE OF ALCOHOL AND TOBACCO.—Dr. David Webster, of New York, in a paper in the Medical Record draws from the cases he has seen of amblyopia the following conclusions:

1. Amblyopia from poisoning by alcohol alone, or by alcohol and tobacco combined, is not uncommon.
2. Amblyopia from poisoning by tobacco alone does occur, but in this country somewhat rarely.
3. Cases of amblyopia from abuse of tobacco and alcohol will usually improve, perhaps to a limited extent, on simple abstinence from the poisons causing the disease.
4. They will improve much more rapidly under treatment by hypodermic injections of strychnia, this drug having a specific stimulating influence upon the nervous portion of the visual apparatus.

ESSENCE OF WINTERGREEN IN PURULENT CYSTITIS.—M. Perier, of the St. Antoine Hospital, Paris, says:

It is a powerful antiseptic irritant. Its price is high, but it is given in very small doses. It is procured from the *gualtheria procumbens*. Chemically the essence is called salicylate of methylene, or methyl-salicylic ether; is only slightly soluble in water. Dr. Perier employs the following combination: R. Essence of wintergreen, six grams; tinct. of guillaya saponaria, thirty grams; water, one liter. This forms an excellent fluid for injecting into the bladder, for washing wounds, and for some simple dressings.

EXTIRPATION OF THYROID GLAND IN GOITER.—Billroth has recently performed successfully extirpation of the thyroid gland in cases of goiter. He uses strictly antiseptic precautions. In the first forty cases upon which he operated there was only one death. The main difficulty is to control the hemorrhage, which he accomplishes by seizing with two of Péan's forceps every piece of tissue to be divided and cutting between them. Formerly hoarseness was a frequent result of the operation; this is now avoided by carefully dissecting out the recurrent laryngeal nerves. Billroth's antiseptic method, by the use of which he obtains such eminently satisfactory results, omits the use of spray. He considers it not only inconvenient to the operator

and assistants but dangerous to the patient, as it may by excessive cooling induce collapse. In lieu of this the wound is irrigated with a five-per-cent solution of carbolic acid. (Vienna Letter in Chicago Medical Review.)

SAYRE'S JACKETS.—The treatment of spinal curvature with plaster jackets, according to the method of Sayre, is rapidly becoming very popular here. One of Billroth's assistants, Wittelshöfer, has obtained excellent results by the use of Sayre's jacket in Pott's disease, but has not met with as great success in the treatment of spinal curvatures. (*Ibid.*)

REMOVAL OF NEVUS.—Dr. Madras writes to the Medical Press and Circular that he removes a nevus by vaccinating the nevus with liquid vaccine lymph, from which inflammation sets in, and in ten days instead of the purple appearance of the nevus there is left a white cicatrix; and adds, "I wish all medical men would follow my plan in vaccinating infants with nevus by vaccine lymph."

[We have used vaccine lymph for this purpose in cases we thought suitable, but without a success at all uniform or satisfactory.—ED. PRAC.]

Notes and Queries.

BETTER TIMES.

'T is ever and ever thus from childhood's interesting yet not wholly happy hour. There is never the end of an Old year but comes the beginning of a New one.

The gentlest of readers need not be startled by this seeming paradox, because it is, though very far from gay, not without a certain wisdom of its own, and is assuredly truthful.

The years come and go. The world grows older, and so do we; always a few pains the more in the back, which indeed are to be endured only through the composure, the courage, and the grace of a good manhood—and not easily so borne; cares always multiplying about the heart. The heart! what a little world it is! how populous! how complex! What wars it has, what loves, what hates, what griefs! It is as a Nation which begins a Republic, to end in a Despotism preceding chaos and utter oblivion.

Delenda est Carthago, or words to that effect; all must perish, but chiefly those who do not look to science, who do not love her, fear her, rely upon her, and pay her a fair day's wages for a fair day's work. Science! she is the only progress. She never sleeps. She never stops. Like the sun, she "renews her light forever." Like a Government-bond, science, unwearied and unwearying—though not, like the Government-bond, untaxed—is toiling for each and all of us, to lighten the load of ignorance that presses us down, down; to subtract the groans from the pains, to multiply the blessings, and, in short, to reduce the algebraic problems of death and disease to a tangible, simple single rule of three: Discretion+Understanding+Knowledge=the Ends of Life! But here science, pursuing the doctrine that God helps those who help themselves, says to man, "I can show you how to be healthy, wealthy, and wise; but you alone can teach yourself how to be happy;" wherein comes our observa-

tion about the heart—which “observation,” as Cuttle (or was it Cuttle?) would say, “lays in the application on’t.” In truth, the heart, as far as science goes, is almost as mysterious as the soul, which is a perfect mystery. Wherefore, brethren, look ye each to his own heart, albeit not downward, *sursam corda!*

The years go on and on and ever on, and death and taxes and unpaid doctors’ bills accumulate. But it is worse than folly to cry, and sometimes things are too tragic to laugh at. The middle course is safest—in moderation to eat and drink, and, if not merry, to be content; for next year will be sure to right the wrongs of this, if we have only the wit to forget them. The present is with us; the future is with God. Life’s troubles come never too late, and sorrow is one of the penalties of anticipating sorrow. The Old Year is gone. Here stands the New Year, all bridled and saddled, at the door. Brother, his name shall be “Better Times” if you will it so. Mount, and a happy ride to you!

“If to hope overmuch be an error,
 ’Tis one that the wise have preferred;
 For how often have hearts been in terror
 Of evils that never occurred? •

“Have faith, and thy faith shall sustain thee;
 Permit not suspicion or care
 With invisible bonds to enchain thee;
 But bear what God gives thee to bear.
 By His Spirit supported and gladdened,
 Be ne’er by forebodings deterred;
 But think how oft hearts have been saddened
 By fear of what never occurred.

“Let tomorrow take care of tomorrow;
 Short and dark as our life may appear
 We make it the darker by sorrow—
 Still shorter by folly and fear.
 Half our troubles are half our invention,
 And often from blessings conferred
 Have we shrunk in our wild apprehension
 Of troubles that never occurred.”

DR. TANNER AGAIN.—Dr. Forbes Winslow alludes to the American performance, and in expressing his doubts as to the genuineness of the exhibition says, “The instant return of an

excessive appetite at the conclusion of the fast, and the wonderful tolerance shown by Dr. Tanner's stomach for large quantities of solid food, when, by all ordinary experience, it could scarcely be supposed capable of receiving the smallest amounts of even the lightest nutriment, lend perplexing appearances to the whole business." (*Journal of Psychological Medicine.*)

BERNHARD VON LANGENBECK.—On the 9th of November in Berlin, 1880, Professor von Langenbeck completed his seventieth birthday, and it was made quite a gala day. Their Majesties the Emperor and Empress forwarded autograph congratulations, and the chief societies (medical and others), the students, besides many private friends, poured in their congratulations from early morning and throughout the day. One of the most remarkable scenes in connection with the day's proceedings was the presentation of an address by his former house-surgeons (assistants, as they are termed in German). These included Esmarch, Billroth, Busch, Trendelenburg, Hueter, Schönborn, who attended in person; while among the signatories to the address were Gurlt, Lücke, Bose, Friedberg, Schädel, and many others. It would be difficult to get together another such a list of foremost names, yet all these men deem it one of their greatest privileges to have served under the great surgeon and to be able to rank themselves as his more immediate pupils. It was doubtless a proud moment for Professor von Langenbeck, and the congratulations he received must have almost overwhelmed him. We heartily wish von Langenbeck health and strength to enjoy his well-deserved, honored reputation for many long years yet to come. (*Med. Times and Gaz.*)

"A PURE DRINKING-WATER."—Professors Hofmann, of Berlin, and Kekule, of Bonn, and other chemists, have published analyses of Apollinaris water, which all agree in showing that it is a very pure water, with about one quarter the quantity of alkaline salts contained in Vichy water.

TO SMOKERS.—Thymol is said to have the property of immediately removing the odor of tobacco.

THE JOVIAL LEUCOCYTES.

Two translucent leucocytes, careless and free,
 Who so unitedly conscious as we?
 With pseudopods joined for want of a hand,
 We jostle our comrades, a rollicking band,
 Through life's fruitful stream, now red and then blue,
 Stocked with food for our thoughts and our protein too.

How badly my lady would relish her rest
 If she knew what a life we lead in her breast.
 How, in a short voyage from artery to vein,
 We can fathom some tiny recess in her brain,
 Rouse a secret memory that she would fain hush;
 For we learn this result by the tell-tale blush
 When we seek through a vessel's diaphanous wall
 To pay the gray cells a personal call.

Then we simulate hope, make her heart palpitate
 With a sweet dream of love, or with terror, or hate.
 But enough; we are summoned by this vascular eddy
 To the root of the vagus, our liver to steady.
Decolletée costumes with very tight stays,
 Champagne and ice-cream, nights turned into days,
 Will shortly produce in the most supercilious
 A train of queer symptoms named commonly "bilious."

The fact is, our hostess is suffering a while
 From the effects of a torpid secretion of bile!
 Farewell, gentle reader! When you talk of free will,
 Think how much must depend on us (or a pill)!

THE INTERNATIONAL MEDICAL CONGRESS OF 1881.—From the circular of the Executive Committee, dated London, September, 1880, we learn that—

The work of the Congress will be carried on in fifteen sections. The days of the meeting will extend from Wednesday the 3d to Tuesday the 9th day of August, both days included. A reception of welcome will take place on the evening of August 2d. The meetings will be chiefly held in the halls of the University of London and in Burlington House, where, in a most liberal manner, the use of rooms for the general and sectional meetings has been granted to the Congress by the authorities of the University of London, the Royal Society, the Society of Antiquaries, the Astronomical Society, the Linnean Society, the Chemical Society, and the Geological Society. There will be a museum open during the meeting, to which contributions of professional interest will be made. Evening receptions will be held, and

excursions arranged to various places of interest. The attendance of our countrymen from all parts of the United Kingdom, India, and the Colonies will probably be large, and various circumstances make it probable that a large number of distinguished men from many countries will be attracted to England as our guests on the occasion of the Seventh Session of the Congress, and it is our desire to receive them with all cordiality and honor. It is convenient to inform our colleagues abroad that ladies will be invited to the social and ceremonial meetings of the Congress, but will not be admitted to its business meetings. It will be necessary for all who wish to make communications to the Congress to intimate their intentions to the secretaries of the several sections, and to furnish an abstract of their papers before the 30th of April, when the committee hope to complete the arrangements for the meeting and to issue a programme of business. All communications respecting the Congress should be addressed to William MacCormac, Esq., Hon. Secretary-general, 13 Harley Street, London, W.

“WHAT A SURGEON SHOULD BE.”—Guy de Chauillac wrote in 1363—

That the surgeon should be learned, skilled, ingenious, and of good morals; be bold in things sure, cautious in dangers; avoid evil cures and practices; be gracious to the sick, obliging to one's colleagues, wise in his predictions; be chaste, sober, pitiful, and merciful; not covetous nor extortionate of money, but the recompense be moderate, according to the work, the means of the sick, the character of the issue or event and its dignity.

What sounder advice can be offered in five centuries?

THE MEDICAL PROFESSION AND THE HOMEOPATHS.—The profession distinctly refuses association with homeopaths because it believes the tenets of that schism—and more especially infinitesimalism—are not doctrines which may be honestly held by reasonable, thinking, and educated gentlemen, but are on the contrary theories put forward to attract the uninitiated and impressible section of the public. Of the doctrine of “*Similia similibus curantur*” we do not speak now, for although with some knowledge of what has been written in its favor, we believe it to be unscientific, delusive, and erroneous, we can still conceive a practitioner honestly holding it and acting upon it. But with regard to infinitesimalism we can not use any other phrase than

to characterize it as a fraud to which no practitioner worthy of professional association should descend. We know, as a matter of fact, that very many homeopaths do not practice on such principle . . . ; and with every desire to take the broadest and most charitable view of the erratic ideas of individual practitioners, we really can not coerce our intelligence to believe that homeopaths have any more real confidence in the doxology advocated in the homeopathic Koran than we have. (Medical Press and Circular.)

MARK TWAIN'S RECIPE FOR NEW ENGLAND PIE.—To make this excellent breakfast dish proceed as follows: Take a sufficiency of water and a sufficiency of flour and construct a bullet-proof dough. Work this into the form of a disk, with the edges turned up some three fourths of an inch. Toughen and kiln-dry it a couple of days in a mild but unvarying temperature. Construct a cover for this redoubt in the same way and of the same material. Fill with stewed dried apples; aggravate with cloves, lemon-peel, and slabs of citron; add two portions of New Orleans sugar; then solder on the lid and set in a safe place until it petrifies. Serve cold at breakfast and invite your enemy.

ANGELS IN THE HOUSE.—M. Bertillon, in the statistical tables of suicides for France and Sweden, says they establish the two following laws: 1. Widowers commit suicide more frequently than married men. 2. The existence and presence in the house of children diminishes the inclination to suicide both in men and in women. (British Medical Journal.)

FOR the benefit of our more conservative brethren we arrange in alphabetical order the names of some of the newest of the great remedies presented to the profession: Areca, ava, bael, berberis, boldo, cercis, coto, chaulmangra, goa, gurjun, hoang nung, penthorum, quebracho, sumbul, sundew, and tonga. (Proc. Med. Soc. County of Kings.)

REGISTRATION.—Two thousand two hundred and fifty physicians have registered in New York City alone, since the passage of the New York medical practice act.

THE AMERICAN PRACTITIONER.

FEBRUARY, 1881.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. . Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

LAPARO-ELYTRO TOMY.*

BY J. N. M'CORMACK, M.D.,

Member of the State Board of Health of Kentucky.

Although elaborate articles on this and kindred obstetrical topics by Drs. Thomas, Parvin, Garrigues, and other distinguished contributors to the medical press have recently appeared, I hope to collect some facts in regard to this operation from these and other sources which in a condensed form may not be wholly unacceptable to the profession. When we consider the high rate of mortality that has, until quite recently, attended all operative procedures in which the abdominal cavity was opened, and the prejudice that has always existed in the profession against any obstetric operation particularly which involved the peritoneum, we can but be surprised that propositions repeatedly made and tried of sub-peritoneal methods of removing the ovum, as substitutes for the cæsarean operation,

* Read before the Tri-States Medical Society in 1880.

should have, with the exception of symphysiotomy, attracted so little attention at the time they were made, and been soon allowed to fall into an oblivion so complete that subsequent obstetric writers either do not mention them at all or speak of them as curious experiments which it is their duty to condemn. Thus we find that, so late as 1867, Stoltz, one of the most eminent of European obstetricians, says in reference to the methods of Jöry, Rityen, and Baudelocque, "These eccentric modes of performing the cæsarean operation have been devised for the purpose of saving the peritoneum and the uterus from the lesions to which failures have generally been attributed. It was easy to foresee that openings so small, made just above the brim, would not suffice for the extraction of the fetus, and that incisions of the vagina and of the lower segment of the uterus would encounter insurmountable difficulties." In less than three years from the time this language was used Dr. T. G. Thomas demonstrated the fallacy of these theoretical objections by delivering after this method a living child from a living woman.

A brief history of the origin and progress of the various subperitoneal methods may be of some interest in this connection.

In the sixteenth century Pineau, a French surgeon, suggested a section of the pubic symphysis as a means of securing increased space in cases of difficult labor from deformed pelvis, in place of cæsarean section. In 1768 Sigault, then a student of medicine at Paris, having imbibed the opinion of the earlier anatomists that the ligaments of the pelvis gave way during parturition, formally proposed this operation in a communication to the Royal Academy of Surgery. The proposition was condemned by the most eminent members of that body as unjustifiable, but Sigault, nothing daunted, maintained the advantages of this method in an inaugural thesis at Angers in 1773, and in 1777 put his theory to a practical test by performing the operation on a living woman. The child was born alive, and the woman was shown to the medical faculty six weeks afterward apparently well. For a time every thing was changed. Sigault was lauded

as a benefactor. A royal pension was granted him, and the Academy of Medicine presented to him and his assistant, LeRoy, a gold medal, which spoke eloquently their appreciation of his discovery. The press teemed with panegyrics of the medical hero, and some of his more ardent admirers claimed that nothing less than divine inspiration could have led his mind to this wonderful conception. A fierce war was waged for and against the operation, but after being performed frequently on the continent and a few times in England it was very generally abandoned, as the section of the symphysis gave very little increased space in the pelvis and the woman was usually left maimed for life.

In 1832 Galbiati, of Naples, operated by a modification of this method, dividing not only the symphysis, but also sawing through the rami of the pubis and ischium on the right side; and when, on the following day, it was found that the space was still insufficient, the bones of the left side were divided also. The child was now found to be dead, and was delivered by embryotomy. The woman died two days afterward. A similar operation, though still more cruel, was performed by Ippolyty, of Naples, in Galbiati's presence, in 1843, with a like unfortunate result.

Many modifications as to the location and direction of the abdominal and uterine incision in making the cæsarean section had been made by Platner, Varoquier, Lauverjat, Sabatier, and others without any idea of avoiding the incision of the peritoneum or uterus, when, in 1807, Jöry was led, by observing that the fetus sometimes escaped into the abdominal cavity after rupture of the vagina, to suggest that the abdominal incision should extend from the spine of the pubis to the anterior spinous process of the ilium, and then, instead of the ordinary uterine incision, that the upper part of the vagina should be opened, and delivery effected through the os uteri, which should be divided if necessary. He performed the operation on the cadaver, and experienced no difficulty in the delivery after incising the os uteri. This method was never tried on the living subject.

In 1820 Rityen proposed, as an improvement on the suggestion of Jöry, that the peritoneum be lifted out of the way and the vagina opened directly, so as to make the operation truly subperitoneal. He attempted to operate in this way the following year, but in making the necessary enlargement of the vaginal incision posteriorly the hemorrhage was so profuse that he performed the cæsarean section, and delivered a living child, the woman dying on the third day. Rityen displayed great ingenuity in planning his operation, and in the report of the case in 1825 he gave detailed directions for its performance, which do not materially differ from those given by Thomas, except that Rityen enlarged the opening in the vagina by incision instead of by laceration. He believed that the oblique incision in the abdomen would not give sufficient space, and suggested a longitudinal one to connect with this.

In 1822 Dr. Physick, of Philadelphia, proposed a method of rending and incising the uterus without wounding the peritoneum, but he made no attempt to test its value in practice.

In 1823 L. A. Baudelocque published a thesis on this subject, and twenty years later he made two attempts to perform the operation. In his first case his experience was similar to Rityen's, the incision of the vagina being followed by so furious a hemorrhage that he opened the uterus in the ordinary way, delivering a dead fetus, followed by the death of the mother a few hours later. In his second case he completed the operation by the sub-peritoneal method, after tying the internal iliac, and delivered a dead fetus. The mother lived seventy-four hours. He added to the report of these cases one of lateral rupture of the vagina, to show, as he says, that incision or rupture of that canal laterally would be necessarily followed by fatal hemorrhage. Discouraged by his experience in these cases, he rejected the subperitoneal methods entirely, and suggested instead an operation which is virtually that of Jöry.

In 1857 Gianplome, of Italy, reported a case in which he made an incision in the linea alba from near the pubis upward

about three inches, and a transverse cut at the lower end of this. He reports the case as gastro-elytrotomia, but gives no details as to how or where the vagina was incised or how the delivery was effected. The child was alive and well developed, but the mother died in less than twenty-four hours.

It will be seen by what has been said that the operation in variously modified forms had been independently conceived by a number of distinguished obstetricians; that it had been attempted by Rityen once, by Baudelocque twice, and by Gianplome once; and that after these attempts it had been allowed to pass so completely from the notice of the profession that Dr. Thomas had tested the operation on the cadaver before he became aware of the fact, almost accidentally, that any one had preceded him in this field by attempt or even suggestion. To Dr. Thomas then is due all honor as an inventor; for his was the wisdom to devise, his the skill to execute, and his the confidence to defend the operation until it has almost become an established procedure in our art.

The history of the operation since its revival begins with the paper read by Dr. Thomas in 1870, based on three operations on the cadaver and one on a woman moribund from pneumonia. In the latter case the feasibility of the operation was fully demonstrated, the child being delivered alive and the woman dying from causes entirely independent of the operation.

In 1874 Dr. Skene, of Brooklyn, operated on a primipara with an antero-posterior diameter of two and a half inches, who had been forty-eight hours in labor. The child was dead and the mother almost moribund when the operation began, previous attempts at delivery having been made by both version and craniotomy before Dr. Skene was called. The woman died in seven hours.

In 1875 Dr. Skene operated on a woman with an antero-posterior diameter of two and three fourths inches, who had been delivered once by craniotomy and twice by inducing labor before the end of pregnancy. Both mother and child recovered.

In 1877 Dr. Skene operated on a primipara with an antero-posterior diameter of one and a half inches, who had been in labor four days. This was an unfavorable case in almost every respect. The woman's general condition was bad. Both hips were ankylosed. The thighs were flexed at almost a right angle with the body, and the knees could not be separated more than one and a half inches. Previous intra-pelvic inflammations had obscured all the normal anatomical points, the organs being glued together by inflammatory products. These were supplemented by hygienic surroundings equally unfavorable, and yet both mother and child recovered.

In 1877 Dr. Thomas operated on a very small and poorly-developed primipara with an antero-posterior diameter of two and a half inches, who had been in labor sixteen hours, saving both mother and child.

In 1879 Dr. Gillette operated on a primipara with an antero-posterior diameter of one and a half inches, who had had more or less pain for a week. The fetus was in an advanced state of decomposition, and much difficulty was experienced in effecting the delivery, success being at last attained by the use of the cephalotribe and cranioclast. The woman recovered.

In 1879 Dr. Himes, of Sheffield, England, operated on a badly-nourished woman of intemperate habits, who had cancer of the rectum and vagina, with a fistulous opening between the two canals. The operation was performed almost entirely in the interest of the child, which was saved.

In 1879 Dr. Edis, of London, operated as an alternative to embryotomy in a case of deformed pelvis in which delivery by the use of the forceps had been previously attempted. The general condition was bad and the woman much exhausted. The woman died, but the child was saved.

It may be proper to add in this connection that Dr. J. T. Everitt, of Stirling, Illinois, performed this operation successfully in 1879 for the removal of a calcified fibroid of the uterus.

Viewed in the light of its success since its revival by Dr. Thomas, the operation is certainly entitled to the serious consid-

eration of the profession as a conservative procedure. It has been performed eight times as an obstetric procedure, with a saving of four women and six children. Even these figures, favorable as they are, are far from representing the truth as regards its success. Of the four women who were lost, one was moribund and two others almost so when the operations were begun, and the other had such extensive cancerous disease of the rectum and vagina, taken in connection with her general health and habits, as to insure the failure of any attempt at saving her life. All the children were saved which were alive when the operations began.

Can embryotomy or gastro-hysterotomy show a more favorable record than this? If we include in our list only those cases in which success can justly be attributed to the operation itself, as Dr. Harris has very properly done in making up his tables of the *cæsarean* section, can either of those operations make so good a showing? The dangers in this operation are from hemorrhage, shock, and septicemia. Of these it may be said that troublesome hemorrhage has not occurred in any of the recent cases, which was probably due to the fact that the vagina was lacerated, and not incised, as we have already seen was done by Rityen and Baudelocque. Time alone can determine whether or not this method of opening the vagina effectually protects against hemorrhage, and until this is done the operator must be prepared to meet it, for it must be borne in mind that fatal hemorrhage has not infrequently occurred after rupture of the vagina during labor. As the peritoneal cavity is not opened, the danger from shock is not great, and the facilities for drainage reduce the danger from septicemia to a minimum.

A wound of the bladder or urethra is an unpleasant accident that has occurred in four out of the eight cases. True, the wound healed spontaneously in nearly all of them, but this accident is so unpleasant in the lying-in chamber that it is of great importance to the success of the operation for the future to demonstrate that its occurrence may generally be avoided.

Probably no more fitting language can be selected with which

to close this paper than that of Dr. Thomas when he said, "I do not regard the claims of laparo-elytrotomy to be established as a standard operation as yet proved, but that as now sufficiently tested by experiment to deserve serious consideration at the hands of the profession."

BOWLING GREEN, KY.

MONGREL OR HYBRID FEVERS.*

BY CHARLES T. REHER, M.D.

S. G., aged twenty-seven, adult male, farmer, always had good health, healthy parentage, was attacked August 16th with a chill, well marked, without any premonitory signs. Chill lasted about an hour, followed by a hot fever of about four hours' duration, the fever followed by a sweat. Took twenty-four grains of quin. sulph. in four-grain doses before chill-time next day. No chill this day. Felt tolerably well until the third day, when there was another slight chill seven hours earlier in the day than the previous chill, followed by a severe fever lasting seven or eight hours. Administered five grains of quin. sulph. every three hours until forty grains had been taken. Patient felt tolerably well until the fourth day, when the third chill appeared two hours later in the day than the first chill, followed by fever of a high grade, and which continued for twenty-seven days, grade irregular, sometimes higher than at other times, unless when arrested by large doses of quin. sulph., but always reappearing in from ten to twenty-four hours after ceasing the administration of the antipyretic. After the twenty-seventh day there was no febrile disturbance for five days. The patient appeared to be fully convalescent, when again a very severe chill occurred. Thirty grains of quin. sulph. was again

* Read before Tri-States Medical Society.

given in three-grain doses, but on the fourth day following there was another and the final chill, followed by complete recovery. During the first week of the continued fever there was some troublesome epistaxis; there was diarrhea during the second and third weeks, some abdominal tenderness, no tympanitis, tongue characteristically typhoid, slight delirium occasionally.

This case was at first diagnosticated as one of intermittent fever, next as a remittent, and lastly as a malarial-typhoid. Alas! what distress an early and a hasty diagnosis may bring upon us! and the same holds good when we are cumbered with an erroneous etiology and pathogenesis. Was there in this case a specific germ that caused all these disturbances—the so-called malarial, as well as the typhoid? or were there two different yet specific germs at work at the same time? The malarial element was plainly present from first to last; the typhoid element was present with equal certainty from a point about one week after the beginning to a point about a week prior to the termination of the attack. The malarial held possession, while the typhoid worked out its self-limited period.

Nearly all, if not all, the cases of fever to which the term typhoid applies, occurring in this region of country, are of this mixed, mongrel, or hybrid character. In a recent work on Practice by an eminent author the term typho-malarial does not appear in the index. However, in the body of the book, immediately following the "treatment" of typhoid fever, we find this note: "*Note.—Typho-malarial Fever.* By this term is meant typhoid fever complicated with a malarial element. In consequence of the existence of a malarial infection the *symptomatology* of typhoid fever is modified, the chief deviations from the usual thermal line consisting in the greater excursions of the daily temperature. This modification of the fever has long been known by all well-informed physicians practicing in malarious regions. Dr. Woodward, of the Army, the medical officer in charge of the medical history of the War of the Rebellion, gave to this combination the name *typho-malarial fever*. In his first publication on this subject Dr. Woodward supposed that there

was something *distinctive* in this form of fever, and that its morbid anatomy differed in important particulars from that of typhoid. . . . In a paper read before the International Medical Congress, at Philadelphia, Dr. Woodward retracted his original observations, admitted that he had been misled, and that the morbid anatomy of typho-malarial fever is merely that of typhoid. Typho-malarial fever has then no reason to be admitted as a morbid entity in nosological systems; does not, in fact, exist. All that can be claimed for it is, that when typhoid fever occurs in an individual saturated with malaria the fever is modified somewhat in its course, has more of the remittent type, and is apt to be protracted, owing to the occurrence of intermittents during convalescence. The introduction of the term typho-malarial was unfortunate, the more especially as, since the claim for its distinctive type having been permitted to go *uncorrected* for ten years, it has been widely received, generally employed, and has therefore years of usage to enhance its duration."

As another example of the same author's high regard for consistency with previously-expressed opinions and for the long-taught notion that the so-called malarial diseases are caused by a specific disease-germ, I will here also give his definition of malarial diseases, thus: "*Malarious Diseases—Intermittent and Remittent Fevers*. Definition: Malarial Fevers are characterized by their prevalence in certain regions of the world known to produce the poison *malaria*, by their periodicity, and by the regular succession of the cold, hot, and sweating stages." I mean no disrespect to the distinguished author when I ask, Is this a definition of malarial diseases? Do intermittent and remittent fevers (the only diseases enumerated by the author under the head of malarial diseases) cover the whole subject? Can we make any claims for scientific medicine by such a lame and imperfect and incomplete presentation of so important a disease? What is gained by *defining* the disease as being characterized by "periodicity and the regular succession of the cold, hot, and sweating stages," and then enumerating an almost endless vari-

ety of types which discredit the definition, even treating of "masked intermittents" and "*substitution diseases!* hematuria, pulmonary hemorrhage, bronchitis, coryza, iritis, jaundice, diarrhea or dysentery, vomiting, urticaria, roseola, and numerous other maladies," "neuralgias, angina pectoris, spasms, delirium, mania, hallucinations, coma, vigil, etc.," the "algid, choleric form, diaphoretic, pneumonic, nephritic, and cerebro-spinal" forms or types—huge mountains resting on a foundation of straw!

It is stated or admitted in the "note" that in typho-malarial cases the system is infected by malaria, and it is also certainly infected by the typhoid poison; nevertheless the author asserts that it (typho-malarial fever) "does not in fact exist." Is not this something that is very puzzling and contradictory? The author means to say that typho-malarial fever should not be recognized (nosologically) because it has no special morbid anatomy by which it can be distinguished from ordinary typhoid or enteric fever. It should be borne in mind that the morbid anatomy of attacks of the common types of malarial fevers differs from that of typhoid fever really only in degree, and this difference is probably due to the longer duration and the persistently high grade of the fever in the latter. Every practitioner is well aware of the fact that there are clinical or *symptomological* features by which the typho-malarial is readily distinguished from the true typhoid; and since the recognition of the true nature of a disease is a matter of vital importance with a view to a judicious therapeutics, it is difficult to understand why there should be objections to a proper nosological recognition of this hybrid disease.

But the point or question of the first importance is, are there two distinct specific poisons present and active in the system at the same time? Denying the possibility of two such poisons disturbing the organization, each in its peculiar way, at the same time, some eminent physicians claim that no such disease as typho-malarial fever can have existence. The author to whom reference has been made admits the presence of two poisons, only claiming, on the ground of its having no distinctive patho-

logical anatomy, the disease should not have accorded to it nosological recognition. If we will only permit ourselves to know that the so-called malarial diseases are diathetic neuroses from climatic or meteorological causes, with various, almost innumerable exciting causes, we shall have small difficulty in extricating ourselves from this labyrinth of puzzling contradictory hypotheses and indefensible positions, and this highly-important subject shall be freed from the fogs and clouds of erroneous notions, in order that it may be viewed and comprehended in the clear light of scientific fact, by means of the key furnished by the physiology of the nervous system.

We have recently been informed that eminent authorities are now placing gout among neuroses. The so-called malarial diseases also belong to that class.

SHELBYVILLE, ILL.

A CASE OF SUPPURATIVE HEPATITIS — DEATH — POST MORTEM.

BY J. M. LITTLER, M.D.

N. W. B., a physician fifty-three years old, bilious temperament, for two years past suffered from general ill health, and had been usually known as a dyspeptic. As a physician he treated his own ailments, which he thought due to a dormant liver and malarious cachexia, his favorite treatment being calomel and quinia often repeated. For years he was subject to obstinate constipation, and his treatment was calomel to move the bowels, then opium to check the catharsis caused by the calomel. For several years he had an abnormal appetite, which he indulged, and, having lost his teeth, did not masticate his food well. For two years there had been a jaundiced condition of the skin and conjunctiva, partially disappearing at times.

When constipated the stools were clay-colored, but when catharsis was produced biliary in character. For some time prior to death the patient complained of pain in the right arm and shoulder. This may, however, have been the result of an attack of rheumatism in early life, and not a symptom of hepatic disease.

On November 11, 1879, while visiting a patient, the doctor had a severe chill, followed by high fever; the next morning another chill. Dr. S. was called to see him, and found a temperature of 104° , pulse 100, tongue coated, and diarrhea. The patient thought he merely had an ague chill, but this time the fever did not abate, and the following morning he had another chill. The symptoms of the previous day continued, and in addition the patient became intensely jaundiced, so that the skin was almost black, and the urine was nearly as dark as the skin. Dr. B. now believed he was laboring under an attack of typhomalarial fever, which diagnosis was not concurred in by his physician or his visiting brethren. The chills came at irregular intervals—every day, every other day, and sometimes two or three in one day. Quinia and other antipyretics were freely used without effect. The temperature varied from 100° to 104° , without regularity as to exacerbations and intermissions. Sometimes after a chill a high temperature would persist for several days, and again there would be only a slight fever for several days in succession. Antipyretics proved as useless in the fever as in the chills. He appeared dyspeptic, and often a few minutes or an hour after eating would vomit his food. This emesis was not followed by any grave symptom, for often immediately after eating he would order a new supply. The stools varied from obstinate constipation to profuse catharsis. The constipated stools were of a black, tar appearance; the thin stools yellow and watery. The patient slept well when not disturbed by chill or fever; there was at night, however, profuse diaphoresis, which left the patient exhausted in the morning. The urine was normal as to quantity; sometimes dark, then pale, and usually immediately after a chill would be yellow. The

intellect remained clear, although the patient was irritable at times, but hopeful regarding his condition.

On December 25th, in company with Dr. S., I visited the patient and examined him. The general symptoms as detailed above were present. There was no organic disease of the heart. At the junction of the tenth rib with a perpendicular line passing through the right nipple was found a tender spot the size of a silver dollar. The skin was not discolored, but I thought I could detect, by inspection and palpation, a well-defined tumor. These symptoms as narrated persisted until spring, sometimes better, sometimes worse, with no hope of a favorable termination. The disease was palliated only, and on the 23d he was prostrated with an aggravation of all the symptoms, and died July 30, 1880.

I made a post-mortem examination ten hours after death in the presence of seven other physicians. Post-mortem rigidity was well marked, body much emaciated, skin nearly a bronze color. The abdominal walls were much degenerated, only a few fibers of the recti muscles remaining. About six kilograms (two gallons) of a turbid liquid were removed from the abdominal cavity; intestines in a healthy condition; and the stomach contained five deciliters (pints) of a dark color, resembling coffee-grounds. The liver was in its normal position, and was removed with difficulty on account of abnormal adhesions to the stomach, intestines, and especially the right kidney. The liver, as to color, weight, and general appearance, looked normal in every respect. The gall-bladder was entirely absent, and in its place was only connective tissue and a waxy substance of brick-dust color. The cystic duct was obliterated by extensive adhesions to neighboring organs. The condition of the hepatic duct and common bile-duct was not ascertained. On section of the right lobe of the liver two centimeters (three quarters of an inch) deep was an abscess containing four grams (one dram) of laudable pus. Several smaller abscesses were found containing from a few drops to four grams (one dram) of pus.

Remarks. Some of the physicians who saw this case thought

the stomach was the seat of the disease; others the alimentary canal or the liver. The stomach was kept in such an irritable condition by the patient's own treatment with mercury and quinia that it became necessary to use morphia hypodermically to allay pain, and this resulted in the opium-habit. The latter part of the treatment was merely supporting and palliative.

Budd was of the opinion that all hepatic abscesses not caused by external violence must be referred to the roots of the portal veins, as ulceration of the mucous membrane of the stomach, intestines, or bile-duct. Ansley says that in the East Indies hepatitis usually precedes the bowel trouble. Waring affirms that in three hundred fatal cases of hepatitis under his observation eighty-two only were preceded by symptoms of disease of the alimentary canal. Bristowe, Andral, and others give evidence to the same effect. It is safe to infer that the theory of Budd would not hold good in this case. The passage of bile per rectum is proof that the hepatic duct and common bile-duct were not obliterated, and the destruction of the gall-bladder is sufficient to account for the pathological appearances; and is it not possible that the original seat of the disease was the gall-bladder, from thence extending to the liver? Of course a gastro-intestinal inflammation may have extended to the gall-bladder. This theory of suppurative hepatitis is new to me, and I advance it as a suggestion. Impaction of gall-stones in the cystic duct may have caused inflammation and obliteration of the gall-bladder,* but there was no evidence pointing to this as a fact. Was the hepatic abscess of recent date? The uncertain symptoms and the character of the pus indicate that the abscesses were recently formed. Could the morbid process have been prevented? I am led to believe that the disease was aggravated by the patient's indiscriminate use of mercury, and that if he had attended more to his digestion and not "whipped" the liver with mercury every time the stools were clay color, he might have been living today.

MUNCIE, IND.

* See New York Medical Journal, vol. I, p. 222.

FOREIGN CORRESPONDENCE.

My Dear Yandell:

LONDON, January 15, 1881.

I began my last letter with a good grumble at the weather. Now it is only fair that even our much-maligned climate should have its due; therefore I am bound to confess that since I last wrote until now we have been rejoicing in deliciously mild and balmy days and nights; and though Old Sol has been mostly conspicuous by his absence, yet at times he has shone out with quite a summer-like power, bringing back pleasant memories of the brighter season.

From some cause or other—possibly the unusual mildness—the number of smallpox cases in this city is steadily increasing. At present it is the east and northeast quarters of London that are chiefly affected, but a tendency to spread to the northern district is already showing itself, and unless energetic measures are taken, and quickly, we shall have another epidemic. There is no doubt that throughout this country the means of dealing with infectious diseases among the poor are lamentably deficient. A dozen or two of extra cases of scarlet fever are sufficient to fill the available hospitals and drive the parish authorities into the wildest confusion. But grumble as we may at the existing sanitary arrangements, it is perfectly clear that were they carried out the danger of infection would be much diminished. Common sense dictates that it is the height of folly to send a sufferer from smallpox to the hospital in a street cab, and yet this is of every-day occurrence. A servant is taken ill, and the master or mistress without further inquiry dispatches her in a cab to the nearest hospital without considering whether she is likely to be admitted or not, thus endangering her life and the lives of dozens of other people. A case such as this occurred only the other day in a family of good position, and the master of the house may think himself lucky to have escaped with a fine of ten pounds. At every work-house a suitable ambulance is kept, which on the receipt of a telegram would be dispatched at once

to the required locality, and thus the patient might be conveyed to the proper hospital with less danger to herself and none to others.

At the last meeting of the Tottenham local board the district medical officer of health, Dr. Lyndale Watson, reported the outbreak of smallpox in a block of wooden houses known as Ward's Alley. "The house where the disease occurred consisted of two rooms, the space of each room being a little over nine hundred cubic feet, and it had been occupied by a man, two grown-up sons, a son-in-law and daughter, with their child." On examining the house Dr. Watson found that the window had not been opened for a long time. In such an over-crowded, ill-ventilated space it is scarcely surprising that the disease soon spread to all the other inmates, though each one was sent without delay to the Edmonton Hospital. A short time ago the medical officer to the Whitechapel district gave some equally startling details. In several rooms in which dwelt a large family circle he found that night and day from forty to fifty chickens were kept, the stench from their ordure being simply frightful. In other houses he found rooms tenanted by happy broods of rabbits, and in one case upward of fifty pigeons, who fed and slept with the family renting the den, in the most delightful unsanitary harmony. Happily such scenes as these are daily becoming rarer and rarer. Zealous medical officers have succeeded in awaking some signs of enthusiasm even in parish authorities, and between the two it will be strange if the genius of disease has not a rough time of it.

The wretched dispute at Guy's Hospital still drags its slow length along, and will no doubt continue so to do for some time. The attention of Parliament, which meets early in the new year, will undoubtedly be called to the state of things existing there, and it is sincerely to be hoped a remedy will soon be found. At the very commencement of the quarrel the *Times*, in the course of a trenchant article on the subject, made some startling statements, and it is a significant fact that these still remain uncontradicted by the parties referred to in them. It was declared

that when one hundred and fifty beds had been closed for want of funds more than £3,000 had been expended on the treasurer's residence. Moreover, it was stated a very large sum had been laid out on the decoration of the chapel, and while the chaplain, a young and active man, had been pensioned off another had been appointed whose views were several degrees higher on the religious barometer. The residents of the district in which Guy's Hospital is situated have taken up the question very energetically, laymen as well as medicals, thus giving to the agitation a much greater prospect of success than if the movement had been of a purely professional character. The dispute stands now on a much broader basis than before, when it was simply a quarrel between the medical staff and the treasurer and matron. The question at issue is the entire system of government of Guy's, and indeed of other endowed hospitals. The other day a very largely attended meeting was held at Blackfriars, Mr. Cohen, M. P., being in the chair, supported by all the leading inhabitants of Lambeth and Southwark, and a number of important resolutions were passed with great unanimity and enthusiasm. It was pointed out that the government of the hospital was a self-appointed class government, responsible to no one, and most arbitrary in its proceedings; while the intention of the founder, Thomas Guy, that a large proportion of the governors should be made up from the medical staff was entirely ignored. It was finally resolved that a petition should be presented to Parliament, and supported by the borough members, praying for a searching inquiry into the abuses of the charity and a careful audit of the accounts. It is sincerely to be hoped, however, that what is termed a "royal commission" will not be appointed to inquire into the matter, for this is practically a constitutional method of politely burying the whole affair. A royal commission pursues its labors for two or three years, perhaps, before a definite result is arrived at. In the meantime a change of government may take place, when all the work already done has to be gone over again. However, the public meeting just mentioned has already borne fruit. The power of the treasurer

is greatly limited, being now controlled by the taking-in committee of governors, which includes two members of the medical staff deputed by their brethren. Let us hope that before long the strong hand of reform may be laid upon the entire system of management.

Some news has reached us from Scotland of importance to the whole medical profession. The prospect of a new medical college, of another source of medical diplomas, is of itself of sufficient interest, but in this case it will probably cause the downfall of an older foundation. Dr. John Baxter, a wealthy Dundee solicitor, has announced his intention of devoting £125,000 toward founding a college in that thriving town, merely making the condition that a satisfactory constitution be obtained, though he hopes the citizens will of their own liberality raise the sum of endowment to £250,000. Now the ancient University of St. Andrews is considerably under an hour's run by rail from Dundee, and the establishment of a new and busy college in that thriving city will probably give the *coup de grace* to the ancient university, which has never had a lusty existence, and which latterly has scarcely contrived to drag on life. Its income was chiefly derived from land, and the land not being let the university endeavored to do its own farming, with the usual fate of amateur agriculturists. Its future is gloomy in the extreme. While the universities of Glasgow, Edinburgh, and Aberdeen are overflowing with students and the professoriate growing rich with fees, St. Andrews has fallen into a siding which not a drop of the golden shower ever reaches. It is a little "lotus-eating" land where in time the most active professors get affected by the prevailing drowsiness. They work to obtain a chair in this charming sea-side town, seemingly so well suited to be the home of the scholar; but in time they work still more eagerly to get away. If they fail, as they usually do—for the courts of patronage know St. Andrews and its ways—they "eat of the enchanted stem," and, forgetting a world in which men write books and make *résearches*, give up to the game of "golf" the mind that was made for mankind.

Nor, if all tales be true, is the Fifeshire University an academic Agapomene. With little to do, the professoriate do less, and, according to the old distich, idle hands always find some mischief to occupy them. It is to be admitted that some not altogether drugged with the prevailing somnolence heroically endeavor to occupy themselves with profit to the human race. They edit magazines, write poetry of their own or criticize the effusions of other bards, teach a dull world to fly, or devote their days and nights to conchology. But these are exceptions, regarded with disfavor by their colleagues. Rarely are all the professors on speaking terms, and very often some offending brother is being "pursued" for "slander" by an irate fellow senator. Thus the principal, who is reported to have declared that he never quite realized—well! Hades—until he had presided over the "Senatus Academicus" of St. Andrews, probably only spoke the sincere feelings of his heart.

The University of St. Andrews has, of course, a medical faculty, and grants degrees in medicine; but it has no medical school and no means of training medical students. Of the three members of the medical faculty, one teaches chemistry and mineralogy, and another is the titular professor of civil history, but, being a distinguished naturalist, lectures on rocks and animals instead of on wars and men. A college devoted to science and medicine could, however, be most suitably established at Dundee, where there is a large and well-equipped hospital. It would attract some of the many students who flock to Edinburgh and Glasgow, and would give new life to the decaying university, of which it might form an integral part. In fact, the new school might occupy the position in regard to St. Andrews University that the Newcastle medical school does to the University of Durham or the Gower Street College to the University of London. Under the new arrangement Edinburgh might be relieved of the overflow of medical students, who can not be properly taught in classes of three or four hundred. Moreover, with the influx of wealth St. Andrews might be induced to raise the standard of its doctorate, and not be tempted to confer its honorary degrees

on so many undistinguished celebrities willing to be taxed ten guineas for that dubious distinction. By the way, Sir Theodore Martin, the biographer of the Prince Consort, is the new lord rector of this academic Eden. He was elected toward the end of last month, obtaining an easy victory over his opponent, Mr. Freeman, the well-known historian.

The other day Frank Buckland passed away from us at the comparatively early age of fifty-four. Though few were aware of it, he was a medical man; indeed he was an old and very popular house-surgeon of St. George's Hospital. On leaving that school of medicine he entered the army and became an assistant surgeon in the Second Life Guards, but soon retired to devote himself to zoölogy and pisciculture. He had always shown the strongest fancy for natural history, from the curious and anecdotal side rather than from a scientific point of view. He was never weary of watching the ways of animals and their different modes of expressing their feelings. His house was a perfect menagerie, and his visitors were constantly amazed and startled by the strangeness of his pets. I remember an odd story he told of his going to Paddington Station to fetch a hamper about the contents of which he was very anxious. He got the hamper, and it was securely strapped to the back of his carriage. On the way home, however, some thieves cut the cords and bore away the prize, no doubt expecting to find wine or game. What must have been their expressions, verbal and facial, when they opened the hamper and found it full of live snakes! By the way, in 1859 Frank Buckland discovered in the vaults of St. Martin's Church, Charing Cross, the coffin of the great John Hunter, the founder of our splendid anatomical museum, and by his exertions it was removed to Westminster Abbey.

No doubt you are aware that a lively discussion has been for some time going on in Paris as to the abominable odors which pervade the gay city in every direction, and just now the "Poëles mobiles" or movable stoves are occupying the attention of the public. It is interesting that just at this time, when so much is being said in England in favor of these stoves, there

should be a decided movement toward giving them up in a country where they are most used. Dr. Angus Smith has been analyzing the gases issuing from one of these stoves in a room where the ventilation was imperfect, and he found that the proportion of carbonic oxide was sixteen times more than that emanating from a chimney. Only recently two young ladies who slept in the same room were found dead in their bed, nor could the accident be attributed to any other cause than asphyxia produced by the noxious gases given out from the stove in their bedroom.

I have just heard of a most extraordinary case of precocious menstruation occurring in the south of Spain. An infant of seven months was perceived by its parents to lose blood by the vagina. The blood flowed for three days, and then ceased. In the following month on the same day the flow returned, and lasted for a similar period; and thus periodically, up to the age of eighteen months, the child appeared to menstruate regularly. At that time the sanguineous flux was replaced by an abundant leucorrhea, which continued until January of the present year, the child being now three and a half years old. Since January the blood has reappeared and continues to return every month. The quantity of blood lost at each period is about an ounce and a half. This child is so well developed that at the age of three she appears like a little woman. The mammary glands are voluminous like little oranges, flexible and turgescient like those of a girl of sixteen, and with large areolæ and prominent nipples. The mons veneris is covered with hair. The intelligence of the child is not, however, as precocious as its physical development, the general behavior being quite puerile. This extraordinary story is given in the Medical Press and Circular. Verily truth is stranger than fiction.

But I must close, for the New Year has begun and I have much to do. Let me conclude by wishing you and your esteemed readers, if it be not too late, a happy and prosperous New Year.

Reviews.

A Practical Treatise on Nasal Catarrh. By BEVERLY JOHNSON, A.M., M.D. (Paris), Lecturer upon Clinical Medicine at the Bellevue Hospital Medical College, New York; Physician to St. Luke's and Charity Hospitals, etc. New York: Wm. Wood & Co. 1880. 8vo. Pp. 182.

It must be accounted progress in medical science to witness the publication of books on small sections of the field cultivated or at least traversed by the general medical practitioner, because such publication implies demand for special treatises, and a demand for them undoubtedly signalizes a closer attention to the various pathological conditions of the sundry apparatuses, organs, and tissues of the human system; and this is the soul of progress.

A London surgeon of eminence, but a very positive contemner of specialism, is reported to have said a few years since that he feared he should live to see a professional sign "John Smith, amputator of the left thigh"—a mot that was at once a measure of the surgeon's wit, his sarcasm, and his contempt for special surgery. Should he now have a congener among medical men proper, it would make the congener sneeze to find a treatise wholly on nasal catarrh; and yet, let it be repeated, such a treatise is the mark of progress, of valuable progress.

Apparently this book is written by one who gives his professional attention exclusively to nasal catarrh; and if so, he should acquire a much brighter knowledge and a much higher skill in this disease than others who do not thus devote themselves, just as the artisan who confines his labors to painting carriages shall exhibit a more esthetic taste in coloring and secure a richer finish than his brother workman who scatters his skill over the whole vehicle.

Specialism is a good thing, but it is not wholly good; and in

this it shares the heritage of all mundane affairs. A treatise on nasal catarrh prepared by competent head and heart may be of eminent service to the general practitioner, and not without value to other specialists. Dr. Robinson writes the anatomy, physiology, and pathology of the nasal passages, and roughly illustrates the anatomy by a woodcut. He pictures and describes the numerous instruments for examination and medication used by himself, and then presents a chapter on prophylaxis and treatment of coryza. Surely there is an apparent lack of a thoughtful consideration of the true physiological activity in some, certainly, of his prophylactic recommendations. "No healthy individual therefore should omit taking, in our climate, a cold sponge-bath upon rising each morning." This is confounding luxuries with necessities. His injunction to maintain dry, warm feet to prevent coryza clearly ignores the influence of habit—an important factor in this and other affairs of dress and regimen; his demand that all persons in good health shall wear flannel next the skin throughout the summer to prevent a possible catarrhal affection of the nose is irrational and a bit of useless cruelty that no right-thinking man would inflict if he had the power; and his discussion of the warming of dwellings is *ad captandum* rather than *ex scientia*. Warming the ambient air by appropriate means neither fouls its nature, abstracts its oxygen, nor chars its motes.

He does not think any measure to abort a forming coryza can be relied on, but he recommends for trial teaspoonful doses of aromatic spirits of ammonia in an ounce or an ounce and a half of sweetened water every two hours for twelve doses, or

R Am. carb.,	} āā ʒj ;
Liq. morph. sulph. (U. S.),	
Mist. amygdal.,	
	ʒ iij.

M. S. A teaspoonful in water (ʒj—ʒjss) every hour during six hours, and afterward every hour and a half.

The patient would probably count the first a free administration of active medicine, and a doctor, unless he were a homeopathist, would most likely esteem the one hundred and ninety-second part of a grain of morphia in a teaspoonful of almond mixture

every hour for six hours not much of an aid to the two and a half grains carb. am., and both of them rather mild medication, and not apt to abort even an incipient acute coryza.

On page 146 the author says, "For quite a time I have given sulphur water from the white sulphur springs at Sharon," and an asterisk directs attention to a foot-note wherein he declares that "during the past two years I have not prescribed this water." Now, query, as the book has just been published, when was it written? It must have been more than two years ago. In a first edition why make a statement in the text and contradict it in the margin?

Notwithstanding the volume lacks the merit of a rigid scientific basis, evinces an *ex cathedra* manner of stating many practical conclusions rather than presenting them as the result of a close and discriminating clinical observation, and occasionally has the appearance that the author was more intent on making a book than on teaching the highest phase of unincumbered practical medicine, yet the treatise has a deal of good things in it, and will be found a valuable assistant to one who is already fairly grounded in medical science and consults it as an aid, recognizing that it is not a guide to be blindly followed in any of its chapters.

J. F. H.

Treatise on Therapeutics. By A. TROUSSEAU and H. PIDOUX. Ninth edition, revised and enlarged. Translated by D. F. LINCOLN, M.D. Vol. 3. New York: Wm. Wood & Co. 1880. Royal octavo. Pp. 362.

This volume completes the republication of this classical work, and places it among Wood's Library of Standard Medical Authors. With one or two exceptions we have praised the twenty odd volumes of this library, and we wish especially to commend the present work to the profession as worthy to be bought and thoroughly read.

Cutaneous and Venereal Memoranda. By HENRY G. PIFFARD, A.M., M.D., Professor of Dermatology, University of the City of New York, etc., and GEORGE HENRY FOX, A.M., M.D., Surgeon to the New York Dispensary, Lecturer on Diseases of the Skin, College of Physicians and Surgeons, New York, etc. Second edition. New York: William Wood & Co. 1880. 18mo. Pp. 309.

A priori one would suppose that diseases of the skin would be better understood and more successfully treated than those of any other tissue, because open to direct inspection and easily accessible for local medication. This supposition is, however, only seemingly true. One may find a papule on the skin, but of itself it does not declare whether it is a lesion of acne, eczema, lichen, prurigo, rubeola, scabies, strophulus, scrofula, syphilis, or variola. One sees only the elevated cuticle; what else is elevated, and how elevated, can not be established by inspection alone. To determine the causative pathological condition one must have knowledge as ample and thorough as is required to diagnose the morbid activity in a lung when one's ear detects a crepitant râle; perhaps even more so.

However this may be, it is safe to assert that the average doctor evinces more hesitancy in diagnosis and less assurance in treatment of cutaneous diseases than in any other general class of disorders of equal frequency and extent. Perhaps the charitable may find sufficient reasons to justify the condoning of this seeming ignorance in a large portion of the profession in the fact that it is but a short time since there was much confusion in the nosology, the etiology, the pathology, and the therapia of dermal disorders. Of a truth it is not yet all passed away, notwithstanding the valuable labors of acute and untiring investigators in every civilized country of the globe for many years. Within recent time, however, much valuable progress has been made in this behalf, and the authors of the volume before us appear to be fully posted in the latest advances, and have an excellent faculty for perspicuously stating the salient points to their readers. The book is too small to be more than a reminder of the more im-

portant conclusions reached by those who have made a special study of the departments of medical science it attempts to cover, but for this purpose the advanced student and busy practitioner will find it most instructive and satisfactory in both cutaneous disorders and venereal contaminations.

J. F. H.

Ophthalmic and Otic Memoranda. By D. B. ST. JOHN ROOSA, M.D., Professor of Ophthalmology in the University of the City of New York, etc., and EDWARD T. ELY, M.D., Assistant to the Chair of Ophthalmology, University of the City of New York, etc. Revised edition. New York: William Wood & Co. 1880. 18mo. Pp. 298.

This little book was originally issued in 1876, and its popularity appears to have called for several reprints, which were made without alteration in text or style. The volume under notice is named a revised edition, and the revision begins on the first page and runs through the book, ending with an appendix not in the original edition, all of the additions increasing the number of pages by thirty. Emendations are made not only by incorporating the advances in ophthalmology and otology that have taken place in the last few years, but the original text has in many places been rewritten with better words yielding a more lucid style.

The first edition was of signal service to the general practitioner at the time of its publication, and this revised edition will be equally so now to the same class, and possibly also it may not be without value to the specialist in the field it cultivates, for it is, as its authors aver, a kind of dictionary of ophthalmology and otology, a reminder and explainer in these departments, but is not intended to and can not take the place of treatises nor supersede text-books, and is without value to the neophyte in general medicine or any of its branches.

There is a sweet satisfaction for the doctor when he has a case

that is rebellious or puzzling in being able to pick up a book that will refresh him, in short space and concise words, of the points on which his memory has become a little obscure, and this is the service which this little volume will render him so far as ophthalmology and otology are concerned.

J. F. H.

A Manual of Medical Jurisprudence. By ALFRED SWAINE TAYLOR, M.D., F.R.S., Fellow of the Royal College of Physicians; Honorary Member of the Medico-Legal Society of New York, of the Société de Médecine Légale of Paris, and of the Medical Society of Sweden; late Lecturer on Medical Jurisprudence and Chemistry in Guy's Hospital. Eighth American edition, from the tenth London edition, containing the author's latest notes made expressly for this edition. Edited, with additional notes and references, by JOHN J. REESE, M.D., Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania, Fellow of the College of Physicians of Philadelphia, Physician to St. Joseph's Hospital and to the Girard College for Orphans, Honorary Member of the New York Medico-Legal Society. With illustrations on wood. Philadelphia: Henry C. Lea's Son & Co. 1880. Large octavo. Pp. 933.

The preface to the American edition of this unequalled work opens with the mournful intelligence that its great author is no more. Dr. Taylor had, we are told, undertaken the revision of this edition expressly for the benefit of his American brethren, and had just completed it when he was summoned from the sphere of his earthly labors. A more complete work, a higher authority on all the subjects embraced within its scope, has not yet fallen from the press.

Clinic of the Month.

TREATMENT OF DIABETES MELLITUS.—Prof. Flint, in a recent clinical lecture on this subject, said :

The treatment is emphatically dietetic. There have been a great many remedies proposed from time to time, recommended as having control over this disease. Now I am not prepared to say that there are no remedies which do exercise more or less control over it. But we should commit a grave error, and act very much at the expense of the prospects of our patients, if we gave any remedy which rendered them less careful in attending to the dietetic treatment. In other words, the dietetic treatment is to hold the first place. This treatment consists in withholding from the food almost entirely (for entirely we can not) sugar in any form, and all the starchy constituents of diet capable of being transformed into sugar. That is the principle. Well, if we merely state that to patients, and tell them they must not eat sugar, they must not eat starch, they will not be likely to carry it out. In the first place, it is not likely they will know enough of the subject to be able to carry it out, even if they were so disposed ; and unless we go further, and are very careful as regards details, we shall find that the elimination of these constituents of the food will not be done ; they will not tolerate it. If we are to succeed we should give appropriate attention to the preparation of the food, the number of articles which the patient should be allowed to take, and the variation of the food from day to day, to make this anti-diabetic diet satisfactory to the patients ; that is, satisfy their appetites and the purposes of nutrition. This can be done, and if it is done the patient carries out the treatment, because it is no hardship to carry it out ; and the treatment is to be carried out not for a few days, or a few weeks, or a few months, but for an indefinite period—for years, and perhaps during the whole of life.

How is this second object to be effected ? We must place before the patient a list of all articles of food which are to be avoided, specifying them ; not contenting ourselves with the statement in general terms, but specifying on the one hand all the articles of food which he must not take, and on the other hand all the articles of food, animal and vegetable, and so on, which he may be allowed to take. He

should have such a list before him, and such articles should be selected from the allowable ones as to make a variety from day to day, and so prepared by the artifices of cookery as to render them satisfactory. It can be done, but it requires patience, and it requires care on the part of the patient or somebody else, and it requires some means. A very poor man, who has no one to look after these matters for him, and who has not sufficient means to obtain all the articles of food which are desirable, will find it very difficult to conquer this disease; and in certain public institutions—this hospital, for instance—it is very difficult to carry out the proper dietetic treatment. It requires so many things and so much attention to details that the dietetic treatment is very unsatisfactory in public hospitals.

The article of food which will cause most trouble is bread, and diabetics realize the force of the statement that bread is the staff of life. Frequently they say at first that they care little for bread, and can get along without it with no trouble; but they do not find it so after a while. They find that there is a craving for bread, and they feel that they can not do without it. So there have been various substitutes for it. There is what is called the diabetic flour, which is bran very finely ground so as to divest it of all rough particles; but it has no nutritive quality whatever. It is really no better than sawdust, so far as nutritive value is concerned, and the patient adheres to it only a short time. For the past two years the patients that I have seen have been in the habit of using a bread which so far seems to be very satisfactory, but it is not entirely divested of starch. It is what is called gluten bread, prepared by the Health Food Company, corner of Tenth Street and Fourth Avenue, of this city. Analysis shows that it is not entirely divested of starch, but it is so prepared that it is not deprived of the agreeable qualities of ordinary bread. Last winter I brought a loaf of that bread before the class and distributed it. I like it to eat myself, finding it by no means disagreeable; and patients take this bread and it meets their wants, thus removing a great obstacle to the successful dietetic treatment of this disease.

I do not deem it necessary to go over the entire list of these dietetic articles. You will find them by reference to different works. But the thing to do is to go into minute details with the patients. Explain to them fully just what is to be done.

Well now, after they enter upon this course of treatment in a very considerable proportion of cases the sugar diminishes at once, and sometimes it speedily disappears. Of course we should examine the urine from time to time to determine its condition as regards the presence of sugar and the amount of sugar. This treatment does not

cause a disappearance of the sugar in all cases. I have a patient under observation now whom I saw for the first time about three weeks ago—a young, thin, intelligent man, who, I have reason to believe, adopted the anti-diabetic treatment and has carried it out fully. I prescribed no medicine at first, and that has been my custom, in order to see what the dietetic treatment will do of itself. In this case it has accomplished very little so far; and this case I am led to fear therefore will be one in which we can not expect much success from treatment of any kind. If the dietetic treatment does not succeed we have no other resources; that is, no medicinal remedy yet known will succeed. It may have a certain influence over the disease, but it will not effect a cure. Then I could mention other cases. A gentleman whom I have seen now for two years, who until lately has taken scarcely any remedies, but has carried out the dietetic treatment very faithfully, presents urine which gives no evidence of sugar whatever. He retains his strength mentally and physically; he is a man of great activity, being engaged in business involving large responsibility, able to go on with it, and finding the dietetic treatment perfectly satisfactory—finding it no hardship.

Now, as to medicines, as I have said, a great number have been proposed from time to time, have been tried a short time, and then have passed out of use, others taking their place. This patient is not under my own care here. He is under treatment with the sulphide of calcium, a fifth of a grain three times a day, together with the dietetic treatment, so far as it can be carried out. With regard to this sulphide of calcium, one patient—a medical man in this vicinity who suffered from this disease—consulted me about three years ago, at which time he found that he had diabetes, adopted the dietetic treatment, relinquished his duties in town, which were exceedingly laborious, and went into the country, and his urine after a time showed no evidence of sugar. When I saw him last, which was a few months ago, I had never seen him look better, and he said to me that he had never felt better in his life. And, by the way, as an evidence that this disease may have existed some time before the patient's attention has been directed to any disease, this has been said to me over and over again by patients, even when the urine still contained sugar. They were not aware that they had any disease, as they felt much better than they had for months, perhaps for years before. They would not be aware that they had any disease were it not for a chemical examination of the urine. If they could put that out of view they would not have the consciousness of having any disease at all. This gentleman, who was a very able practitioner, was led to use the remedy that

I have just mentioned from finding it recommended, as he told me, in some medical journal. He has the impression that the sulphide of calcium had considerable to do with his apparent cure. Well, I am free to say that when I talked with him about it my own belief was that he was apparently cured by the dietetic treatment, and by a change of habits of life, the avoidance perhaps of some excesses.

To one patient who came to see me I stated these facts with regard to that remedy, and I said, "If you feel no objection I will prescribe it for you." This was a case in which the dietetic treatment had been extremely successful, and most of the time there was very little if any sugar in the urine. I told the patient that the remedy in question would do no harm; that I thought I could say that. He said, "Well, let us try it." I put him upon the remedy, beginning with small doses, and increasing them. I began in his case with an eighth of a grain, but I think we might begin with a quarter of a grain; in other cases I have begun with a quarter of a grain three times a day, after a fortnight doubling it, going up to two grains, and continuing it indefinitely. Well, this patient went on in that way, and he is very much impressed with the idea that it has been of use to him. Now we must make some degree of allowance with regard to the opinion of the patient as to the effect of the remedy. I do not mean to say that the remedy has not been of value, but I do not feel as certain as the patient does with respect to its value. I am also prescribing the same remedy in three or four other cases, but the period during which it has been used is too short, I think, to enable one to form a correct judgment with regard to it. I shall certainly continue the use of the remedy, for it can do no harm; and moreover, it is a gratifying thing to the patient to be taking a remedy which he supposes may be of use. The moral effect of remedies, as people's views are now, is by no means inconsiderable; it is a factor which we can not altogether ignore in the treatment of disease.

This disease I believe may be kept in abeyance indefinitely by appropriate dietetic treatment, and yet I am extremely doubtful whether a patient can ever properly consider that there is a permanent recovery.

NITRATE OF ALUMINUM IN PRURITUS VULVÆ.—Nitrate of aluminum dissolved in five to ten parts of water has been used with success as a wash in pruritus. As this salt crystallizes with difficulty and is very deliquescent, it is best prepared *ex tempore* in form of a fifty-per-cent solution. 10.5 parts of dry aluminum

hydrate are dissolved by digestion with sixty-five parts of pure nitric acid, specific gravity 1.180, the solution diluted with water to one hundred and ten parts and filtered. The solution must be kept in glass-stoppered vials. Its specific gravity is 1.170–1.172. For each part of the crystallized salt two parts of this solution are to be taken. (*Pharm. Zeit.*)

TREATMENT OF DISEASED JOINTS.—Professor Verneuil lately read before the Société de Chirurgie de Paris an important paper on the immobilization and the mobilization of diseased joints, from which we extract the following :

Some urge that as the prolonged fixation of a joint may so alter its structure as to lead to ankylosis, therefore we must limit the fixation to the shortest possible time. Others maintain that rest, rigorous and persistent, is the best cure for an arthritis; therefore prolong the period of rest to the utmost extent, and disallow any attempt at movement. Bonnet, of Lyons, after having inclosed the diseased joints in immovable apparatus for a certain time, always took care, when the right moment seemed to have come, to commence passive movements, in order to restore suppleness to the joint.

This mixed practice seems nowadays to be almost universally adopted. Surgeons no doubt immobilize joints because they have found out that it is necessary, but they are always preoccupied by the supposed ill effects of prolonged fixation, and eagerly look out for the moment when they may recommence the movements *which are to prevent* ankylosis. Ankylosis, in fact, is a ghost which frightens not only the lay public, the patients, and their friends, but also nearly all general practitioners and not a few surgeons.

"In my practice and teaching for a long time past I have combated to the uttermost this idea of ankylosis and its prevention by passive movement. Perhaps my views may seem paradoxical; nevertheless I am led on to the discussion by facts. Thus a child with joint-disease was recently brought to me. I applied absolute fixation to the joint. All the pain ceased, swelling disappeared, and recovery was taking place. At the end of some weeks I was asked when it would be necessary to remove the bandages and commence movements. To this I replied that the time was not yet come. Nevertheless in a short time the general practitioner, probably urged on by the friends, removed all the apparatus. As a consequence, the benefits then gained were lost, and the lesion progressed. The child was again brought.

Some excuses were made. I again ordered fixation, and the child is now in a fair way to recovery."

The facts invoked against fixation are indeed very few, and only moderately conclusive. If the accusation is true we ought to be surprised that the proofs are so uncommon. To discuss the subject with advantage we must at least distinguish between healthy and diseased joints, and among the latter we must further establish varieties. First then as regards healthy joints. I affirm that there does not exist a single fact which shows conclusively that fixation, however long continued, has ever led to ankylosis. This long-continued fixation may, it is true, give rise to anatomical modifications such as diminution in the extent of the articular surfaces to a thinning of their lining cartilage, also to a reduction in size of the synovial sacs to a less abundant synovial secretion, and to functional changes such as stiffness of the joints and limitation of movements. Hence, not unnaturally, when the necessity of immobilization has ceased, a certain time will be required for the complete restitution of the articular function. But there is nothing in all this which at all resembles ankylosis. It is only comparable with what takes place in mucous glands which are no longer traversed either by ingesta or by excretions. They do not become obliterated, as was taught by Bichat, but simply reduced in size. Their healthy condition, however, is again established in a few weeks, or, at most, a few months, when their function is once more revived. What better example could one have than the bladder in the case of a vesicovaginal fistula? It becomes reduced to a mere pouch, but again resumes its normal capacity as soon as the fistula is closed. I am well aware that every where autopsies and experiments on animals are quoted, but neither one nor the other have completely convinced me. I could show that the various lesions which are revealed are not in any way of the nature to lead to ankylosis, but can be attributed to other causes rather than to the fixation. On the other hand, I might mention the numberless examples of well-known cases in which the joint, for a long time kept immovably fixed, has notwithstanding retained its structure and rapidly resumed its functions when permitted to do so. These latter facts are at least as numerous as the opposite ones, and, being more simple, are also more convincing. It is clear either that fixation *alone* suffices to alter a joint (and then it ought always to do so), or there is need of a peculiar predisposition and a suitably prepared soil, in which latter case it behooves us to seek whether this predisposition does not play the principal rôle. The learned professor inclines to this latter view. He admits that at the termination of any arthritis, in the treatment of which fixation more or less prolonged has

been made use of, there is a diminution, a suspension, or even an abolition of movement, but does not see why this functional suppression should be attributed to fixation rather than to other causes, especially the anatomical lesions present in the joint.

Prolonged fixation incontestably modifies healthy joints, but not profoundly, either in form or in the structure of their constituent parts, or as regards their ultimate function.

There does not exist in scientific records any authenticated examples of ankylosis produced in a healthy joint by mere fixation. The cases hitherto advanced in support of such an idea are capable of another interpretation. On the other hand, there are on record numerous examples of joints which have been kept immovable for long periods and have regained their anatomical and physiological integrity.

Inflammation no doubt occupies a first place among the causes, and as it is absolutely proved that fixation is an antiphlogistic of the first rank it is illogical to think that it produces those effects which it is known to cure.

If in certain cases fixation continues to produce ankylosis it is not that fixation which the surgeon secures by apparatus, but rather that which is due to the contracture of the peri-articular muscles. As much as the latter, which may be called *active*, favors and indeed provokes articular disorder, by so much the former, which is *passive*, is powerful against them. There is therefore a capital distinction to make between the two varieties of fixation.

Ankylosis, on the other hand, far from being produced in articular disease, is but a rare termination to it. Exceptional in strumous arthropathies, a little more frequent in rheumatic mono-synovitis, it is especially to be feared in suppurative and traumatic arthritis, though no one variety of disease is certain to produce it.

The exaggerated fear, therefore, of ankylosis has caused many practitioners to make grave errors, and has frequently led to the too early leaving off of passive fixation and the too premature commencement of movement.

Mobilization consequent on joint-disease is of two kinds—artificial or mechanical, and natural or physiological—brought about by muscles, either voluntary or otherwise. The former, which ankylophobes use exclusively, is admissible when we have to deal with the rectification of vicious attitudes of limbs and to treat confirmed ankyloses, but it ought to be rejected as useless, powerless, and dangerous if we would avoid ankylosis. The latter, on the contrary, is of extreme utility if applied at an opportune moment. With time it accomplishes in a remarkable degree the restoration of the articular function.

He concludes by saying that artificial fixation on the one hand and natural fixation on the other are the two principal therapeutic agents in arthropathies. The one combats anatomical lesions; the other restores physiological action. We may assist the former by different means—local, pharmaceutic, or hygienic; we favor the second by electrization of the peri-articular muscles, practiced during the period of fixation with a view to the prevention of degenerescence.

To combat the inflammation is the best means to prevent ankylosis. As regards surgical measures proper, I know of none better than continued extension, and in extreme cases preventive resection. (*Medical Times and Gazette.*)

SULPHATE OF COPPER FOR THE ERUPTION CAUSED BY RHUS TOXICODENDRON, RHUS RADICANS, ETC.—Dr. A. W. Wiseman writes, in the *Virginia Medical Monthly*, that for this eruption he uses but one remedy, and has had less trouble with it than with skin-diseases generally. It is the sulphate of copper. It may fail in some acute cases. He has no particular strength for the solution. He commences with just enough to color the solution, and gradually increases the strength until it produces a slight stinging, and applies it three or four times a day.

TREATMENT OF INFANTILE DIARRHEA BY POWDERED CHARCOAL. Dr. Guérin says that for a long time he has been in the habit of combating infantile diarrhea by mixing the milk in the sucking-bottle with charcoal powder. He usually adds half a teaspoonful of the powder to one bottle of the milk. The infants take the milk readily, and in a few days the greenish stools of the little patients change to a dark yellow, while their consistence becomes increased. In addition to the admixture of powdered charcoal, the milk is diluted by one half or one third of its bulk of sugared water. He has frequently seen intractable summer-complaints yield in a few days to this treatment. (*Medical Record.*)

BOKKENHEUSER ON SALICYLIC ACID IN ACUTE ARTICULAR RHEUMATISM.—Dr. Bokkenheuser, of Copenhagen, concludes from a careful observation of eighty-one cases of acute articular rheumatism, treated with salicylic acid, that by this method the

number of acute cardiac affections occurring in the course of the disease may be markedly diminished, and that it is especially useful in preventing an attack of pleurisy. He found also that salicylic acid was very useful in suppressing articular affections due to exacerbations of a chronic articular rheumatism. On the contrary, he found the drug of no avail in simple non-rheumatic arthritis or in attacks affecting a single joint. (New York Med. Journal.)

TREATMENT OF TYPHOID FEVER.—The debate on the treatment of typhoid fever, at the Metropolitan Counties Branch of the British Medical Association, was opened by Dr. Bristowe, who dealt with the subject under the heads of food, medicines, alcohol, and baths. A milk diet was urged as of chief importance. Dr. Bristowe doubted if any remedies had direct effect in controlling hemorrhage. Alcohol was not necessary, except in a few cases, when it should be given for its stimulant effect. As to baths, he doubted their efficacy, and thought if they were as valuable as statistics showed their good effects should be obvious whenever they were tried. In two cases he had had he thought fatal pulmonary congestion had been produced by the use of baths. He concluded his remarks by sketching the manner in which he himself would wish to be treated were he the subject of the fever.

Dr. Broadbent, who followed, thought the diet should not be wholly restricted to milk, which it was important to give only as food, and not as a drink to relieve thirst; for diarrhea was often produced by the undigested curds. Sometimes beef tea set up diarrhea. Besides correcting the diet when diarrhea was present, he would use opium enemata. In cases of hemorrhage he gives large doses of opium to arrest peristalsis. Ergot and turpentine were also useful. Opium was also of great value in the relief of tympanites. He described his attitude toward baths as one of gradually increasing confidence.

Dr. Cayley read a letter from Dr. Brand, of Stettin, giving some remarkable statistics from the military hospitals of Ger-

many in favor of the bath treatment—a chief element in success being the adoption of the method at the very onset of the disease. This was possible in private practice and in military hospitals, but not in the civil hospitals, where patients do not seek admission until they are compelled to do so by the advance of the disease. In Germany it had been found possible to carry out the bath treatment in private practice. The treatment was certainly *not* a dangerous one.

Dr. Norman Kerr made some remarks, in which he admitted the need of the medicinal use of alcohol in some cases of the disease.

Dr. Collie said that out of a hundred cases seventy-five would get well with simply good nursing, fifteen would die, and the remaining ten might or might not recover. Such was his experience, and he had abandoned the bath treatment as not only useless but even dangerous. He could not put faith in continental statistics, and thought that many cases of mistaken diagnosis were included in them.

Dr. Ord had certainly seen good effects from the use not of cold but of slightly tepid baths in selected cases of high pyrexia, which he believed had a relative effect as well as a control over the whole morbid process of typhoid fever.

Dr. Mahomed spoke in favor of the cold-bath treatment. He also mentioned a case of severe hemorrhage which he had recently successfully treated by transfusion. (London Lancet.)

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THE EXTIRPATION OF THE UTERUS AFTER THE METHOD OF FREUND.—Dr. Rydygier narrates (*Berliner Klinische Wochenschrift*, No. 45, 1880) a case in which he performed this operation for cancer of the uterus. The patient died the next day. Dr. Rydygier makes some remarks on the details of the operation. He regards it neither as one very easy of performance nor as being extremely difficult. Before opening the abdomen he inserted a speculum into the vagina, and cut through the vaginal mucous membrane all round near its attachment to the uterus. By this modification he claims that the length of time

the peritoneum is exposed is lessened; that the vaginal insertion is cut through more easily in this way than from above; that there is less risk, when it is divided thus, of wounding bladder or rectum; and that the incision made in this way can be more accurately executed so as to include all the diseased part. This part of the operation he performs in a different room from that in which the abdominal incision is made, and between the two parts he thoroughly cleanses and disinfects his hands. He does not use the three ligatures recommended by Freund, for he says they can not always be tied tight enough to surely prevent hemorrhage, and sometimes one of them includes the ureter. He ties the uterine artery separately, and says there is no difficulty in doing so. He believes that these modifications make the operation both more easy and less dangerous. (*Med. Times and Gaz.*)

TRACHEOTOMY IN INFANTS.—It is well known that tracheotomy, for whatever reason it be undertaken, is always more fatal in early infancy than in more advanced years. One of the youngest of the successful cases on record is interesting, not only on account of the age, but also because the operator was the father of the little patient. We refer to the well-known case in which M. Scoutetten, of Strasburg, in 1830, successfully operated on his own infant, aged six weeks. Some doubts have been expressed as to the nature of the disease which called for the operation. We will not stay to discuss the matter, contenting ourselves with the moral that there is nothing in the operation itself incompatible with recovery even at the age of six weeks.

Since this date some other cases of early tracheotomy have been recorded: Mr. Joseph Bell, of Edinburgh, reported a successful case at six months and a half; Mr. Tait, at seven months; Dr. Greenfield, at ten months; Mr. Cooper Forster, at eleven months. There are doubtless many other cases, if we could collect them, of successful operation in very young subjects. The recollection of them will help to reconcile those who have hitherto abstained from operating simply on the ground of youth.

Another successful case in a very young infant (aged nine weeks) is recorded in the *Berliner Klinische Wochenschrift*, No. 40, 1880. Dr. H. Steinmeyer, of Brunswick, was sent for to see an infant who was said "to be ill with diphtheria and choking." The child came of a phthisical mother. It was normally developed, and during the first four weeks of its life had always been quite healthy. In the fifth week it had had abscesses near the anus, and others on the palms of its hands. The infant wasted considerably during this time. In the eighth week a cough had come on, and it daily became worse and emaciated, and difficulty in breathing set in. This latter symptom persisted, and on its becoming very urgent Dr. Steinmeyer was sent for. When first seen the usual symptoms of laryngeal stenosis were very manifest; viz. cyanosis, with drawing down of the facial muscles during inspiration, which was loud and hoarse. Expiration was short and inaudible. There was great retraction in the epigastric region. Nothing abnormal, beyond *oidion albicans*, could be detected in the mouth or pharynx. The epiglottis, when examined by the finger, did not appear to be sufficiently swollen to be the cause of the obstruction. A laryngoscopic examination could not be satisfactorily made. On the exterior surface of the neck, over the right thyroid cartilage, and in size corresponding with it, a very slight swelling was detected. It was only appreciable to the eye by carefully comparing the two sides. It did not fluctuate. The temperature was 103° F. (39.5° C.), and the pulse could not be counted. Tracheotomy was decided upon. But the exact cause of this obstruction could not be made out, although an abscess in the neighborhood of the larynx was suspected. The operation was a very difficult one, and lasted an hour. The trachea was no larger than a goose-quill. It was displaced considerably to the left of the median line. An anesthetic does not appear to have been used. The operator, "on account of the infant's restlessness, found great difficulty in introducing the canula. Respiratory trouble ceased immediately on opening the trachea, all cyanosis quickly disappeared, and the infant rapidly recovered. It could not, however, take the breast

on account of coughing. It rested well all the next night. Four days after the operation, the temperature still being 103° F., the child became very restless. The swelling over the thyroid cartilage was more manifest, and the superimposed skin somewhat reddened. An incision into it through the tracheal wound let out pus, and on enlarging the opening on a director a very considerable amount of pus was evacuated. The cough continued troublesome. Attempts to remove the canula were unsuccessful. The temperature was normal. After the tenth day the child, which up to this time had continued to improve, began to get worse. Its food (milk) regurgitated through the nose. There was nothing appreciable to account for this unfavorable change. On the thirteenth day after the operation, however, suddenly, and while the child was trying to scream, a quantity of fetid pus was discharged through the mouth, while some more issued from the tracheal wound. Very shortly after this the child began to cry audibly. The canula was removed on the following day, and complete recovery was very soon established.

It will be obvious that the case was one of retro-pharyngeal abscess. The diagnosis is often quite impossible, and under the circumstances tracheotomy appears to have been the only resource. We congratulate the operator on his successful case. (Medical Times and Gazette.)

MANAGEMENT OF THE THIRD STAGE OF LABOR.—Dr. Max Runge, in a communication to the Obstetrical Society of Berlin, criticizes the current teaching regarding the management of the third stage of labor. He takes as the special text of his animadversions the directions given by Fritsch, which are to the effect that *immediately* after the birth of the child the uterus is to be seized by the hand on the abdomen, and the placenta pressed out. Dr. Runge states that for a long time he faithfully carried out this method; and so did others in Prof. Gusserow's clinique. The objection to it is, that the squeezing out of the placenta is begun before that organ has become completely separated; consequently, when the placenta has been expelled, often

a bit of the membranes may yet be attached to the uterus and be left behind after the placenta has been taken away. While this teaching was carried out it was quite a common thing for a pair of forceps to be needed to remove these retained pieces of membrane, and secondary post-partum hemorrhage became extraordinarily frequent. He refers to a former communication of his own, in which, treating of post-partum hemorrhage, he expressed his surprise that within a short time he had had many cases of this complication. Then he supposed this frequency was fortuitous. Now he knew the reason, which was his undue haste in pressing out the placenta. Midwives are now instructed, after the birth of the child (and having, of course, seen that the uterus is sufficiently contracted upon the placenta to prevent hemorrhage), to wash and dress the infant before proceeding to press out the placenta. The separation of the placenta and membranes, Dr. Runge holds, is not complete until, upon an average, about a quarter of an hour after the birth of the child; and therefore about this length of time should be allowed to elapse before the placenta is pressed out. Since instructions based upon this principle have been given to the students and midwives of the Strasburg Obstetric Clinique post-partum hemorrhage has become of very infrequent occurrence. (*Journal of Psychological Medicine.*)

PALATABLE QUININE.—Dr. Dodson writes in the *Maryland Medical Journal* that the unpleasant taste of quinine is largely ameliorated by giving it with Liebig's liquid extract of beef; that he has been able to administer it in this way in cases where otherwise it was impracticable; that this preparation of beef, given before taking the quinine, appears to have a tendency toward preparing the stomach for its reception.

ESMARCH'S POWDER.—The so-called painless caustic powder of Esmarch is prepared as follows: Arsenious acid, one part; morphia sulphate, one part; calomel, eight parts; pulv. gum arabic, forty-eight parts; mix.

ON THE RADICAL TREATMENT OF HERNIA WITH THE AID OF CATGUT AND LISTERIAN ANTISEPTICS.—Thomas Annandale, Regius Professor of Clinical Surgery in the University of Edinburgh, says, in *Edinburgh Medical and Surgical Journal*:

The operation which I advocate and practice is to expose the neck and upper portion of the sac by a free incision, to make a small opening into the sac, to carefully return the contents, and in the case of adherent omentum or intestine to ligature and divide adhesions, to separate the sac from its attachments to surrounding textures, to draw down the sac and apply a catgut ligature around its neck as high up as possible, to cut away the sac immediately below the ligature, and then to stitch together with a continuous catgut suture the margins of the abdominal opening, the stump of the ligatured neck, and the surrounding cellular tissue. The whole operation and the after-treatment are performed under strict Listerian antiseptic principles. One advantage of this method is that it is applicable, with perhaps some little modification, to all the varieties and all the conditions of hernia, with very few exceptions. The risk of this operation, if carefully performed, I believe to be slight; for it would appear that a hernial sac, unless of very recent origin, is not by any means sensitive to serious inflammatory action, and it can therefore be handled and operated upon with wonderfully little risk. I will now refer to the classes of cases in which the operation may be used.

1. In cases of strangulated hernia.

In 1872 I operated on Mrs. M., aged seventy, for strangulated femoral hernia. On opening the sac a knuckle of congested gut was found, and a large piece of omentum, the latter being firmly adherent to the sac. Having divided the stricture, I ligatured the omentum with catgut, cut it across, and returned the intestine and ligatured stump of omentum into the abdomen. I then separated the sac from the surrounding textures, drew it down, and, having applied a catgut ligature around its neck, cut away the sac and adherent omentum. The result was most satisfactory, and pleased me so much that since then it has been my practice, in all cases of strangulated hernia in which the gut was in a proper state to be returned, and in which a distinct sac existed, to adopt this proceeding; but during the last two years I have, in addition, stitched the margins of the abdominal opening together in the way already described. In illustration I relate the following case:

Miss L., aged thirty-two, seen in January last. She had suffered from an irreducible femoral hernia for three years, and on the morn-

ing of the day I visited her she was seized with symptoms of strangulation shortly after straining herself in lifting some heavy books. The usual operation for strangulated hernia was performed, and on opening the sac it was found to contain a large knuckle of gut and a portion of adherent omentum. Having divided the stricture and ligatured and cut across the omentum, the gut was returned, the neck of the sac ligatured, the sac and adherent omentum cut away, and the stump of the ligatured sac carefully stitched to Poupart's ligament and the surrounding tissues. She made an excellent recovery, and now is able to go about with perfect comfort, but wears a light truss as a matter of precaution.

I could relate other cases of a similar nature, but it is unnecessary. This addition to the ordinary operation for strangulated hernia does not in any way add to the risk of the operation; and I can say from experience that it is not only an assistance in preventing descent of the hernia during the healing of the wound, but it is also a valuable means of diminishing the risk of the hernia returning in the future.

2. In permanently irreducible hernia.

The risks connected with hernia of this kind and the difficulty of treating such cases have been experienced by all practical surgeons. At any time the condition of strangulation may result, and the risk is increased owing to the difficulty of effectually applying a truss or bandage so as to prevent a further descent of the abdominal contents. The operation advocated in this paper is perhaps of more value in this class of case than in any other, and I offer a few cases in illustration.

CASE I. Mrs. C., aged fifty, suffering from a large irreducible femoral hernia the size of an infant's head. A swelling was first noticed in the region of the hernia five years before, and until eighteen months ago was reducible. Since then it has been irreducible, and during the last few months has given her so much inconvenience that she required to lie almost constantly on her back. The operation already described was performed, and as a large mass of omentum was adherent to the sac it was ligatured and cut away. She was dismissed cured and wearing a light truss fourteen days after.

Case II. Mrs. —, aged about forty, the wife of an esteemed medical friend, was brought to me by her husband a few months ago on account of an irreducible femoral hernia. She had noticed a swelling in the femoral region for six years, but it gave her no trouble until August last, when it became suddenly larger and caused pain and sickness, which passed away after resting and pushing back a portion of the tumor into her abdomen. Shortly after this the swelling again increased suddenly and gave rise to similar symptoms, which, how-

ever, passed off when treated as before. An examination of the swelling and a consideration of the history of the case caused me to diagnose it to be one of irreducible femoral hernia, the result of adherent omentum, and I advised operation to prevent the risk of strangulation. Her husband, being naturally anxious as to the question of operative interference, asked Dr. M. Duncan, who was in Scotland at the time, to meet me in consultation, as he had previously attended my patient. Dr. Duncan agreed with me as to the advisability of the operation, which was performed in the usual way on the 6th of October. A large piece of adherent omentum was present in the sac, and it was ligatured and cut away along with the sac. In less than two weeks the wound was quite healed. A few days after a light truss was applied, and the patient returned home within three weeks after the operation.

CASE III. J. R., aged forty-four, admitted June 15, 1880. Two years and a half before admission the patient strained himself, and after this a swelling gradually appeared in the left groin and passed down into the scrotum. It was never perfectly reducible, and the patient, being unable to wear a truss, could not follow his employment, which was that of a miner. When examined there was found in the left side of the scrotum a swelling the size of a child's head. This swelling had a distinct neck passing up into the abdomen, but only slight impulse was obtained when the patient coughed. The corresponding testicle lay on the anterior aspect of the tumor, and the tumor itself was somewhat lobulated, and felt like a fatty growth. The patient, being anxious to obtain relief, requested me to operate, and accordingly I made a free incision over the neck and upper part of the hernia, and in doing so exposed the testicle and cord, the constituents of the latter being spread over the tumor. The testicle and the constituents of the cord being held away, a very thin sac was exposed, and on cutting into it a large mass of adherent omentum appeared. On tearing this aside a portion of the large gut, with fatty processes attached showed itself, and on examination this contained gut was found to be the sigmoid flexure of the colon and a portion of the descending colon. Further examination determined that there was no true sac on the posterior aspect, but the large intestine, uncovered by peritoneum, formed the posterior wall of the tumor. With time and care the adherent omentum and the adhesions of the gut to the tissues behind were ligatured and divided, the whole contained gut was returned, and the remnants of the sac were drawn down, ligatured, and cut off, and the margins of the abdominal opening stitched together in the usual way. One month after the operation the wound was

healed and a light truss applied. The patient returned home well on the 19th of July.

Prof. A. details two other successful cases, and then adds :

I must now refer to the only fatal case which has occurred in my practice. At the beginning of last year I met the case of Mr. S., aged fifty. For many years he had suffered from a scrotal hernia on the right side, which gradually increased in size until it formed a swelling which reached nearly to his knee. For two years it had been irreducible, and as he could wear no truss or bandage his life had become miserable to him, and he was anxious to obtain relief by operation or by any other means. On the 22d of April of the same year I exposed by incision the neck and upper part of the sac, and without opening the sac endeavored, but without success, to return its contents into the abdomen. Finding that the contents of the hernia were adherent to the sac, I opened the sac, and discovered that a large piece of adherent omentum was the cause of the irreducibility. When the sac was opened a large quantity of the small intestine escaped, and it was with some difficulty that this gut was returned. The adherent omentum being ligatured, and the contents of the sac, which consisted of nearly the whole small intestine and a large quantity of omentum, having been returned, the neck of the sac was ligatured, the sac cut away and stitched to the margin of the external ring in the usual way. For three days the patient progressed favorably, but after this symptoms of intestinal obstruction showed themselves, and he died two days after. My opinion is that some twisting of the gut took place and caused the fatal result. I attribute the non-success of this case principally to the large size of the hernia and to the protrusion and return of so much of the small intestine—a proceeding likely to lead to some malposition of the gut.

These cases, together with others of a similar nature which have come under my observation, are, I venture to think, an encouragement to treat by operation permanently irreducible herniæ when the patient's condition admits of such a proceeding.

3. In reducible hernia.

I am no advocate for operative interference in cases of reducible hernia unless the condition is irrelievable by the application of a truss or other means, and is giving rise to serious inconvenience. When operative treatment is required in these cases I am inclined to advise the adoption of the proceeding of which this paper treats. This proceeding has certainly the one important advantage that the surgeon

sees what he is doing, and I have not found that the free exposure and handling of the parts is attended with any special risk.

The author then reports a few cases, and concludes :

I do not say that these cases which I have related are necessarily permanent radical cures, but I feel confident that the operations performed relieved them of a condition otherwise incurable, and permitted the patients to wear with success a truss and to go about and follow their employment without risk. Whether the operation is inferior or superior to Wood's method of radical cure in cases of reducible hernia, I am not prepared to say, as further experience of the results of the former operation is required; but it certainly has the one advantage that it is applicable, as I have already mentioned and I hope proved in this paper, to all herniæ and to their various conditions, with very few exceptions.

BLADDER-DRAINAGE.—Mr. John Chiene, Surgeon to Edinburgh Royal Infirmary, recently read before the Medico-Chirurgical Society of Edinburgh a paper on this subject, from which we make the following abstract :

In August, 1876, a case of perineal fistula was admitted into the clinical wards in the Royal Infirmary. A large opening, the result of sloughing, had formed in the floor of the urethra behind the scrotum, through which all the urine passed at each act of micturition. It was evident that a plastic operation was necessary. From previous experience in such cases the great delay in the healing seemed to me to be due to the difficulty experienced in keeping the wound dry. If a catheter is tied in the usual way, and a plug worn, which the patient removes at each call to micturate, the result is, that on the day following the operation, during micturition, the urine passing along the sides of the catheter reaches the wound and interferes with or altogether prevents union. Even if no plug is used, the urine being allowed to drip into a basin between the patient's legs, the same result follows, to say nothing of the damp, uncomfortable condition of the bed.

The problem seemed to be, How can the wound be kept dry for some time, and thus placed in favorable conditions for healing? The method adopted after various experiments and trials was as follows: A gum-elastic catheter is introduced and fixed to the penis with sticking plaster. Care is taken that the eye of the instrument is just within the neck of the bladder. To this catheter an india-rubber tube is

fixed, of sufficient length to reach without being strained over the side of the bed to the floor. It then passes into a bottle. The bottle and tube are filled with carbolized water before attaching the apparatus to the catheter. Care is taken that no air can get in at any of the joints. It is well to introduce a piece of glass-tubing at a convenient part for observing the direction of the flow. In order to keep the india-rubber tube steady in the bottle, a piece of glass-tubing is attached to its extremity. If the glass-tube extends beyond the neck of the bottle, any folding of the india-rubber tube at this point will be prevented. It will be evident that a siphon action is in this way established, with a suction power the strength of which depends on the height of the column of water, and which will draw the urine into the eye of the catheter as it passes drop by drop from the openings of the ureters into the bladder, and a constant slow current of water will pass along the tube into the bottle. The bottle is allowed to overflow into a basin, which as it fills can be emptied by the nurse without any risk of displacing the apparatus. The bladder is kept constantly empty, with the exception of two tiny streams of urine from the ureters to the eye of the catheter. Care must be taken not to have too great a fall, or the suction of a piece of mucous membrane into the eye of the catheter will cause uneasiness and plug the catheter. The height of the hospital bed is generally sufficient, and in some cases even a less height is all that is required.

It will be evident to the experimental therapist who may desire to study the action of diuretics that by this apparatus much will be learned. The bottle being graduated, the rapidity of action can be easily studied. Since using the instrument on the human subject I have learned that Professor Goltz, of Strasbourg, has used a similar apparatus in an experimental research requiring an accurate estimate of the exact amount of urine secreted in a given time. In the first case the apparatus did not act perfectly, and on the sixth day the wound became wet with urine. The result was only an improvement. Still the success was so marked that I tried it in the following year in another case in which the flow of the urethra was destroyed for an inch and a half by injury. The result in this case was a complete success. After the plastic operation the apparatus was applied, and the wound kept perfectly dry until it was soundly healed.

Since 1877 this method has been used in a case of recto-urethral fistula with much advantage; in 1879 in four cases of chronic persistent perineal fistulæ which had resisted the usual means of treatment. In three of these cases a stricture, in the fourth a perineal abscess, the result of cold, started the condition. In all a permanent cure resulted.

In these cases the instrument was kept in continuously for periods varying from a week to a fortnight. It was occasionally removed in order to readjust it. During the time it was removed for cleaning, the patient was instructed not to make his water. I have never found any bad results whatever follow its use. It is also of value in hastening healing and keeping the patient dry and comfortable during the healing of the wound after external division of a stricture.

Let me, however, more particularly direct attention to bladder-drainage in chronic cystitis. It will, I think, take a most important place in the treatment of that troublesome and common affection. The two great symptoms are frequency of micturition ("irritable bladder") and excessive quantities of mucus in the urine ("catarrh of the bladder"). The first symptom is at once relieved by the use of the instrument, and in some cases its use even only during the night gives the patient unspeakable comfort; but in the majority of cases it is best kept in the bladder continuously. The difficulty is the choking of the instrument with mucus. This will be prevented by having a double eye in the catheter, and by raising the bottle night and morning in order to make a back flow, which clears the instrument. The patient can very soon tell when the flow ceases, and the bottle can then be raised slightly above the level of the patient. At once the plug of mucus is displaced. It is very interesting to observe the effect of rest to the bladder as indicated by the decrease in the quantity of mucus. In one case of perineal fistula complicated with chronic cystitis this improvement was very marked. The systole and diastole of the bladder are excessively increased in irritable bladder. No heart would stand such an increase in its pulsations. This, in my opinion, is one of the reasons why chronic cystitis is so intractable; and any means by which we can prevent the periodic rise and fall of the bladder, the incessant unrest of the organ, will always be of the greatest value in relieving inflammation of the viscus. For its value in chronic cystitis alone I would be inclined to recommend a careful trial of bladder-drainage. By some means or other let it be carried out; the method matters not. What is important is to come to a conclusion as to the value of the principle involved. Its main value in chronic cystitis, in my opinion, is to give the bladder rest. It acts as a drainage-tube in a wound or in an abscess cavity. It has, however, a value in urethral fistulæ; in those requiring plastic operations it keeps the wound dry and allows speedy union to take place; in those requiring only that the urine which is abnormally passing along the fistulæ and keeping them open should be prevented from so doing by being drained off immediately on its entrance into the bladder. *To give the bladder rest*

and *to keep the urethra dry*, I know no better means than that which I now advocate. I am not aware that the idea of keeping up a constant suction-power which draws off the urine as it drops into the bladder has been previously recommended in surgical practice. It is certainly a very different thing from the use of the catheter tied in and used in the ordinary way. That the means recommended are simple, is self-evident; they can be applied by any one. That no harm is done to the patient, is the result of my experience; that all operations on the urethra are treated more certainly by the use of the apparatus, and that it is of great use in many cases of chronic cystitis, relieving the symptoms in all and giving permanent relief in others. That the symptoms of chronic catarrh are in some cases very intractable, is evident when we remember that chronic cystitis has been treated by the lithotomy incision in order simply to rest the bladder.

In the discussion which followed the reading of the paper several points were raised to which it may be well to allude:

1. Its use in catarrh of the female bladder. I have tried it, but found the siphon did not work. I believe in consequence of the short urethra air passed into the bladder and destroyed the siphon action.

2. The use of the red rubber catheter instead of the gum-elastic instrument. The red rubber catheter is not so easily fixed in position.

3. Its use in enlarged prostate and malignant disease of the prostate. I have not used it in these diseases. In one case of enlarged prostate I tried it, but it did not work efficiently. It might, however, be of use. For my own part, since Mr. Jonathan Hutchinson directed my attention to the value of the red rubber catheter for drawing off the urine in prostatic cases the disease has been robbed of many of its terrors.

4. The danger of phosphatic deposit on the point of the catheter. This has never given me trouble. I suspect the reason is that the point of the instrument is not lying in urine, but is practically dry, the urine being drawn off into the eye of the instrument by the suction power, to which I believe the value of the instrument is to be attributed.

5. I have never had occasion to use it in rupture of the membranous urethra. In such a case I should most certainly try it. It would be of great assistance in preventing extravasation of urine.

6. The habitual night and morning raising of the bottle is, in the majority of cases of chronic cystitis, sufficient to keep the catheter clear of mucus and prevent plugging of the instrument.

7. How the catheter should be fixed to the penis. In tying in a flexible catheter, which adapts itself to the curves of the urethra, the best way, in my experience, is to affix a strip of sticking-plaster to the

catheter firmly with silk. This strip passes down either side of the penis. A piece of boracic lint is wound around the catheter at the meatus urinarius under the strip of sticking-plaster. Another strip of sticking-plaster is wound around the penis over the strip passing down the sides of the organ. After it has been around twice, the strip passing along the sides of the organ is turned back toward the point of the penis, and then two more turns are applied over it. It is then turned down again, and two more turns are applied. In this way the catheter is practically incorporated with the penis. I have always used common sticking-plaster. The rubber plaster might, however, I think, with advantage take its place.

THERAPEUTIC EFFECTS OF CHLORATE OF POTASSIUM.—Dr. Alex. Harkin, in an exhaustive paper on this subject in the *Dublin Journal of Medical Science*, says:

In *tabes mesenterica* the chlorate has a powerful effect, and in the diarrhea and dysentery of children, when given by the mouth and by enema, the most satisfactory results have been observed in my own practice and in that of the Vienna faculty, as published in the *Rudolph Hospital Reports* for 1869. Finally, in diseases of the skin, which generally are characterized by debility and a dyscrasis of the blood, the salt is a most potent remedy. In *erysipelas* no one is likely to question its value, particularly if combined with iron. It is equally useful in *erythema nodosum*, in *eczema*, in *impetigo* and *purpura*, in *lupus* when of *scrofulous* origin, in boils and carbuncles, in *acne rosacea*; and in that ailment so intractable and so troublesome to the fair sex, *acne punctata*, I have prescribed it with unvarying success. The remedy given internally appears to have a controlling power on the sebaceous glands and follicles, and prevents the usual progress toward suppuration. In *acne rosacea* the salt seems to combat the enlargement of the blood-vessels and congestion of the skin, on which the disease depends. In *epithelioma* and *cancroid* affections of the skin and mouth its efficacy as a lotion is generally acknowledged.

HYPODERMIC ADMINISTRATION OF QUININE.—Prof. Whittaker writes, in *Cincinnati Lancet and Clinic*:

During the past six months I have made numerous experiments with the subcutaneous injections of quinine in cases of pronounced or masked malaria, where the condition of the digestive system prevented its absorption when administered *per os*.

I have entirely discarded all vehicles except water, and rely solely

upon heat to obtain a perfect solution. Put into a test-tube twenty grains of the bromide of quinine and add to it two drams of water. The tube should be corked, not to preserve the substance—for it is still crystalline in this proportion—but for cleanliness. To use the drug, heat the tube over a gas flame, coal-oil lamp, or other means of illumination. The tube should be held above the light, of course, and not in it, that it be not smoked, and hence rendered opaque. Two or three minutes suffice to reduce the quinine to a limpid, crystalline fluid in the tube. Thence it is poured in sufficient quantity into a teaspoon, previously warmed by holding over the flame, and from the spoon it is taken up into the syringe, warmed also the same way, and ready for use, which must be immediate. It may be injected anywhere, but always *under* and never *into* the skin. The ordinary syringe contains half a dram, and this introduces about five grains at a time.

I have never known a patient to object to the reintroduction of the needle for the injection of ten or fifteen grains, if need be. The whole operation—no previous preparation being necessary—occupies about five minutes' time, not a tithe of that often consumed in irrelevant conversation.

THE GREEN COLORING-MATTER EJECTED FROM THE STOMACH.*—Dr. Betz states that the color of the green substance thrown up from the stomach is commonly explained to be bile. The color is gray-green, yellow-green, grass-green; sometimes dark-green. When the vomited mass is kept in a vessel for some time the green part settles; a portion, however, is suspended by bubbles in the phlegm. This green matter is heavier than and insoluble in water, whereas bile readily mixes with water. Chloroform and ether will not dissolve this green matter as it does the bile. This green matter remains undecomposed for a length of time during the hottest weather, and its reaction is not always acid, but, like the gastric juice, sometimes neutral and even basic. Dr. Betz concludes that the green color is (except in certain cases) not due to the presence of bile, but (other animal matter being excluded) to a vegetable substance, and revindicates the old name *vomit^{us} massac herbaceæ*.

* Translated for AMERICAN PRACTITIONER from the *Memorabilien*, October, 1880, by Guido Bell, M.D., Indianapolis.

The green color is produced by chlorococcus, a dotted alga whose further development could not be observed. It does not seem to be in connection with *torula cerevisiæ* or *sarcina* or *oidium lactis*. Only the lepthothrix was seen sometimes within the mass, and resembles the green covering of the teeth, forming a matrix to lepthothrix buccalis. Dr. Clemens came to the same conclusion thirty years ago.

Clinically the following points have to be considered: (1) The quantities vomited are sometimes so large that they make the impression that the stomach can not contain so much bile; (2) The ways and means by which the bile can be carried into the stomach by pressure are not explained; (3) If the green substance is bile, then it would form a mechanical mixture, which is contradicted by the experiments given above.

The green mass appears the last on account of its specific gravity (or perhaps of its natural tenacity). The bitter taste is frequently observed in other fungi. Nevertheless the author does not deny that bile can reach the stomach under certain circumstances, but only exceptionally.

SALICYLATED STARCH IN ECZEMA.—Dr. Kersch, writing on salicylic acid, gives the following method for treating eczema: The scabs are to be removed by two-per-cent carbolic acid solution and castile soap, the parts are dried with cotton prepared for wound-dressing, then a two-per-cent alcoholic solution of salicylic acid is applied with the same cotton, and finally salicylated starch strewn over. Said starch is prepared by pouring pure starch in small quantity into a two-per-cent alcoholic solution of salicylic acid while stirring it for some time; then the alcohol should be poured off and the starch pressed in dense wool-flannel and dried at 80° C. Dr. Kersch gives a number of brilliant cases, and believes that former experiments with this remedy were not careful enough. (*Ibid.*)

FRACTURE OF THE ATLAS.—Dr. Betz describes a case of fracture of the atlas which was followed by death fourteen weeks

afterward. There were no symptoms at first except a local pain, but symptoms of pressure, inflammation, and degeneration followed. A piece one half centimeter in length was broken loose from the posterior portion of the atlas, which had been pressing on the medulla. He refers to a case of Dr. R. Kline, saying that such a fracture does not always kill outright, as was formerly believed, and that it is worth some closer surgical researches, (*Ibid.*)

WICKERSHEIMER'S PRESERVING LIQUIDS.—

	For Injecting Bodies.	For Immersing Bodies.
Arsenious acid,	16 grams.	12 grams.
Sodium chloride,	80 "	60 "
Potassium sulphate, . . .	200 "	150 "
Potassium nitrate, . . .	25 "	18 "
Potassium carbonate, . .	20 "	15 "
Water,	10 liters.	10 liters.
Glycerin,	4 "	4 "
Wood naphtha,	$\frac{3}{4}$ "	$\frac{3}{4}$ "

(*Arch. d. Pharm.*)

The foregoing has been reported as being an inefficient preservative of subjects. The Ohio Medical Record advises Hegar's solution where a non-poisonous preservative is required. It has a pleasant odor, and exterminates moths and vermin. Hegar's solution is composed of salicylic acid, twenty parts; boracic acid, twenty-five; potassium carbonate, five; dissolve in hot water, five hundred parts; glycerin, two hundred parts; add oil of cinnamon and cloves, fifteen parts each; dissolve in alcohol, five hundred parts.

INJECTION BROU.—The following is believed to be the formula of the much-vaunted gonorrheal injection of that name, taken from the register in the French public offices:

R Zinci. sulp.,	grs. viij (.52);
Plumbi. acet.,	grs. xv (1.);
Tinct. catechu,	3 j (4.);
Tinct. opii,	} āā 3 iij (96.).
Aquæ,	

Notes and Queries.

THE JAPANESE QUACK.—We find the following description of the quack in the “Loyal Ronins,” a curious and interesting romance translated from the Japanese and published by G. P. Putnam’s Sons, New York: “No one is more to be pitied than he who places his life in the hands of a quack. Unfortunately many such foolish persons exist, because throughout all ages people have been more inclined to listen to rogues than to follow the advice of honest men. Must we not be cautious? There are many mock doctors to be found every where. These fellows, utterly ignorant of the science of medicine, which the ancients so closely studied and reduced to a system, pretend to cure diseases of which they do not even know the names, and entrapping their victims by a great show of books and scientific instruments, by threats and deceit, compel them to swallow the most nauseating compounds. If once in a while they make a hit the whole country rings with their praise, and they walk the earth with their heads in the clouds.

“The ancient professors of medicine established certain rules which are followed to this day. They first ascertained the comparative value of drugs, then mixed them in specified proportions, taking care that the effects of one ingredient should counterbalance the others, and thus produce a harmonious result. A patient suffering from fever requires medicines containing *in* (cold) properties, and one shivering with a chill should be dosed with *yo* (hot) drugs, to equalize the temperature of the system. However, a person afflicted with fever must not take only cold-producing physic, or the one who has a chill be treated with drugs that merely create heat. A skillful physician gives certain quantities of each remedy, in addition to which he uses acupuncture and the moxa. In the foregoing consists the science of medicine, which is only acquired by long study and

serving a number of years as assistant to a regular practitioner. Some drugs ought to be administered in their natural state; others require careful preparation, or their effects prove very injurious to the patient. Now a quack, not having studied these principles, blindly administers his nostrums, trusting to the god of luck to carry him through. If his patient dies he solemnly shakes his shaven head and says to the weeping relatives, 'I was sure of this from the beginning.'

"Beware of quacks! They live upon the weakness of human nature, and may be known by the long pole of their *norimono* (inclosed litter), their assumption of profound gravity, and the audacious manner in which they promise to cure most incurable diseases. At the same time they take care never to approach a person suffering from a contagious malady without having their sleeves stuffed with disinfectants, while their meanness is such they will keep their bearers walking all day, never so much as thinking to give the tired men a lunch or a cup of *saké*. There is another kind of quack who is too parsimonious to have a *norimono* or even a man to carry his medicine-case. These scarecrows trot around the streets from morning till night with their pockets puffed out with packages of nostrums, and slip through the crowds like eels between the rushes, as though in great haste to visit innumerable patients. Such creatures are well described by the proverb, 'A quack looks like a man who has stolen a cat and hidden it in his pocket.'

"My friends, if you wish to live keep away from the doctors; though in giving this advice I do not mean to assert there are no able physicians. These, like all good people, follow their profession quietly, and after performing a cure do not go clucking about like hens."

PREVENTION OF FOGS.—Dr. C. W. Siemens has communicated to Nature a plan for remedying the growing evil of London fogs. The essence of the scheme is a reduction of the amount of coal consumed for domestic and other purposes. Dr. Siemens advocates the substitution of a special gas grate for the ordinary coal

fire. Two sketches illustrate the article and show at once the simplicity and efficiency of the plan. The two chief drawbacks to the gas grates in common use are the expense and the obnoxious fumes that are given off. Both these Dr. Siemens professes to have got rid of, and he claims for his plan an economy of heat, fuel, and money. When in use the cavity of the grate is filled with coke, which is heated by the jets of the gas flame. From some comparative experiments Dr. Siemens concludes that the coke-gas fire is not only warmer and cheaper than an ordinary fire, but is smokeless. "I hold," he states, "that it is almost barbarism to use raw coal for any purpose, and that the time will come when all our fuel will be separated into its two constituents before reaching our factories or our domestic hearths. Such a measure would not only furnish us with a complete solution of the smoke question, but would be of great value also as a money saving." Dr. Siemens generously adds that he has taken up this question without any idea of profit, and shall be happy to furnish builders and others desirous to introduce the coke-gas grate with the necessary indications to insure success.

NATIONAL ASSOCIATION FOR THE PROTECTION OF THE INSANE AND THE PREVENTION OF INSANITY.—The council of this important organization held a business meeting in New York City on the 11th of last November—Miss A. A. Chevallier, secretary; H. B. Wilbur, M.D., president; G. M. Beard, M.D., treasurer; Joseph Parrish, M.D.; E. C. Seguin, M.D.; Mrs. M. P. Jacobi, M.D.; J. C. Shaw, M.D.; Margaret A. Cleaves, M.D.; Hiram Corson, M.D.; Hon. L. L. Lamberton, LL.D. Doctors Jacobi, Cleaves, Seguin, and Shaw were appointed a committee to take steps to induce medical colleges, medical journals, and asylum authorities to do all in their power to diffuse a better knowledge of psychiatry among the profession, and to specially educate physicians who may desire a thorough knowledge of the subject. A committee was also formed to obtain facts and statistics relating to the methods and use of restraint and the use of labor in the asylums of this country. The purpose of this association

as expressed in the above plan of work can not fail to be of interest to every physician. The aim is to do more effective work by creating an organized protection for the insane of the whole country.

EDWIN BOOTH AS HAMLET.—The following compliment from the London *Lancet* to Mr. Booth may induce some of our readers who might not otherwise do so to witness, when they have opportunity, the representation of the melancholy Dane by one of the greatest living actors:

Although matters theatrical lie outside the domain of *The Lancet*, we have always made it a custom to direct the attention of our readers to every fresh exponent of Shakspeare's greatest character, because we feel that the study of this puzzling psychological fiction has perhaps more genuine interest for members of the medical profession than for any other class of persons.

Edwin Booth gives, we believe, a correct view of the Prince's mental condition. Of a sensitive and affectionate organization, he is profoundly affected, both mentally and physically, by his interview with the Ghost; and Mr. Booth succeeded in producing the impression, without any strain or effort, that this trying ordeal left an effect upon the nature of Hamlet so that, to use a common expression, he was never quite the same man afterward. His interview with Horatio and Marcellus after the disappearance of the Ghost was a really fine rendering of a most difficult part of the play, and from the time of the Ghost's exit to the fall of the act-drop it was evident that the mental shock had been terribly severe, that it was an effort to him to collect his thoughts, and that while conversing with his friends his mind was often far away.

For the rest, we must say that Mr. Booth's representation, although it was not marked by any very original or striking points, was, from a merely technical point of view, one of the best pieces of stage-performance we ever saw. The minutest syllable that Mr. Booth uttered, even in his most subdued tones, was, we believe, plainly audible in the far corners of the pit and gallery. To hear a fine voice, used with consummate skill, giving utterance to Shakspeare's masterpiece, is in itself a great treat—a treat which many popular Shakspearian actors quite fail to give us. Again, Mr. Booth's command of what is known as "stage business" we have never seen excelled. His actions were rapid, suitable, free from all exaggeration, and, if we may be allowed

the expression, exquisitely neat. The use which he makes of a pair of delicately-chiseled, nervous hands is such as any actor might envy. To give an example, his attitudes and manner while questioning his friends, in the first act, as to the circumstances of the Ghost's appearance to them, were at once masterly and easy. Mr. Booth has an expressive face and a fine figure, and his pronunciation is quite free from Americanism.

We beg leave to ask our very able transatlantic cotemporary whether he does not generally find the pronunciation of cultivated Americans, whether on or off the stage, free from what he is pleased to call Americanism?

JACKSONVILLE, ILL., December 31, 1880.

Eds. American Practitioner:

Please permit a brief comment upon the paper of Dr. Hibberd upon Typhoid Fever, in the December number of your excellent journal. The paper gives no treatment for the fever itself, and discourages doing much for the accidental symptoms. He says that during the current year he has treated a grave case in his own family, in which the only medicine given was twenty grains of quinia, two drams of Squibbs's deodorized tincture of opium, and four ounces of brandy. These remedies were for symptoms, and he scolds another man for giving seven remedies for symptoms. There is nothing in the paper to inspire confidence that there is any remedy for the disease. Indeed he says, "The contagium of typhoid fever having found a fruitful lodgment in the human system, the whole succession of phenomena must be concluded." He quotes Sir William Jenner as saying, "I have never known a case of typhoid fever cut short by any remedial agent."

In Beale's Archives, vol. v, No. 17, 1870, p. 61, may be found an article entitled "The Therapeutical Uses of the Sulpho-carbolates," by A. E. Sansom, M.D. In this article it is stated that from twenty to sixty grains of sodium sulpho-carbolate given every four hours can be borne without inconvenience. The urine under this administration gave no evidence of the presence of carbolic acid, though a considerable quantity of sodium

sulphate was found. The urine showed a remarkable tendency to resist putrefaction. The inference was drawn that the agent must be rapidly absorbed and carried through the system, the double salt being decomposed in the blood, the sodium sulphate escaping by the kidneys and the carbolic acid by the lungs. One fourth of the weight of the sulpho-carbolate of sodium is carbolic acid, and hence it is established that in this way from fifteen to ninety grains per diem of carbolic acid can be administered without exhibiting any poisonous effects.

My attention was attracted by this publication soon after it appeared, and I immediately commenced using sulpho-carbolate of sodium in typhoid fever. I soon fell into the routine of giving one dram (four grams) dissolved in half a tumbler of water every three hours, or one ounce a day. Regarding the product of the secretion of the lower portion of the ileum as poisonous to the system by the absorption of some of the fluid portion of the mass, I added to the routine a cathartic, every second day, of fluid extract of senna (with aromatics), regardless of the question of constipation or diarrhea. I inferred that the diarrhea depended upon the presence of irritating material, and that advantage would be gained by carrying it off; and experience soon proved the correctness of the inference.

This routine of an ounce of sulpho-carbolate of sodium in dram doses every day and three fluid drams of fluid extract of senna with aromatics every second day I have recommended to many friends, and I think that all have been pleased with the treatment who have been satisfied to follow it through. It must be borne in mind that there is no other manifestation immediately of any effect except a reduction of the temperature. The expectation of seeing any marked result must lead to disappointment. I have never seen a case exhibit alarming symptoms in which the treatment had been commenced early in the disease or previous to the manifestation of high temperature. In the absence of an epidemic it is customary to treat the cases as if they were malarial or remittent, and, failing in this, the diagnosis is supposed to be made out as against any disease for

which quinia is a remedy. The patient is then put upon the treatment for typhoid fever, and it is continued until the patient is far advanced in convalescence or as long as the thermometer exhibits high temperature.

Last autumn the wife of a laborer went through this course without being seriously sick, though she lay in bed two weeks. Her husband, on her recovery, began to feel a lassitude and anorexia, for which the liberal administration of quinine afforded no relief. Though walking about, he was put upon this treatment just the same as if he had been bedfast. It was three or four days before the symptoms began to abate, and he apparently went through the disease without going to bed in the daytime.

If we assume, as the best explanation of the observed phenomena, that the disease is dependent upon an infection arising from decomposing animal matter, whether solids and fluids, as in cesspools and dissecting-rooms, or gaseous, as in the breath retained in small apartments, or large apartments containing many people, or communicated from the sick to the healthy, and again assume that this infection may be destroyed by carbolic acid or other disinfectants, we have a foundation of an expectation of finding a remedy which, taken into the system, will arrest the further development of the material, whether organic or inorganic, which is the essence of the infection. If in sulpho-carbolate of sodium we have found a combination in which a patient can take fifteen grains of carbolic acid every three hours, or one hundred and twenty grains a day, without nausea or other unpleasant effect, and continue the treatment day after day until two pounds have been taken or half a pound of carbolic acid, we have found a remedy which answers the theoretic conditions. If, again, the observation of the employment of the remedy through several years, under the eyes of several physicians who are near enough to each other to compare experiences, fails to develop any unpleasant effect, and fails to encounter any serious or fatal case in which the remedy is commenced early and pushed through without omission or

abatement, we have a strong argument for the reversal of the verdict of the uncontrollability of typhoid fever.

Respectfully yours,

DAVID PRINCE, M.D.

OPERATIVE SURGERY.—Dieffenbach thus discoursed on a branch of that art of which he was so illustrious an exemplar (*Unsere Zeit Art.*):

Of all branches of medicine, operative surgery is the one most calculated to inspire its votaries with enthusiasm. It is the bloody warfare with disease for life, the struggle of life and death. It is not boldness and unfeelingness which here carry the day, but calmness and enthusiasm, knowledge and skill. Without being possessed with a certain natural disposition for this particular branch, without being thoroughly penetrated by it and feeling an almost unlimited devotion to it, its disciple will forever remain a mere tyro. He may be ever so well versed in the various disciplines of medical science, he may be ever so well acquainted with surgical operations in all their varieties and according to the best masters, he may be able to apply them to the corpse and even the living body; notwithstanding all this, he will never rise above the rank of a subordinate. What alone makes the true surgeon is this, that he knows and is able to execute what is not contained in fixed rules and formulas; that, always original, an inventive Odysseus, he knows how to create his own resources, and is ready at any moment, amid the most trying circumstances, to begin battle without previously holding a council of war. The painter is taught to draw, to mix his colors, and to put them on canvas, to make a correct copy; then he paints from his own ideas, he embodies his own thoughts and fancies. One might learn to make verses, but teaching can not make a poet; the poet is born. One might learn to use the knife, but frequently it is necessary to cut in a manner contrary to established rules and customs. Such is operative surgery.

THE BEST GENERAL PRACTITIONER IN LONDON.—The Canadian Journal's London correspondent says:

It is generally acknowledged that Mr. Jonathan Hutchinson is "the best all-round man" in London, as the saying goes. His manner of speaking is very quiet, but his views are expressed with great clearness and conciseness; at the same time there is the greatest candor, and no evidence of professional pride or obtrusive *egoism*. Both

his style and manner—in fact, the entire demeanor of the man—is a rebuke to the self-important, dogmatic, assertive class of medical practitioners. He is not ashamed to say before a class of medical students, “I do not know exactly what is the state of matters in this case.” Mr. Hutchinson most explicitly believes that *erysipelas is not a specific fever*. His definition of erysipelas is, “An inflammation characterized by pitting and vesication with a definite outline, which has a strong tendency to shift its position.” It is contagious, and arises *de novo*. He condemns local treatment by poultices, and prefers lead and spirit lotion. He lays great stress upon the statement that erysipelas has *no period of incubation*. Mr. Hutchinson’s views on transverse fracture of the patella are at variance with the common teaching on this subject. They may be summarized thus: The greatest danger is from separation of the fragments by *effusion*. “There is no spasm of the quadriceps extensor.” There is no special advantage in bony union, provided the fibrous or semi-osseous union be firm, as it generally is. The treatment is to be directed specially to getting rid of the effusion.

PROF. LUNSFORD P. YANDELL, M.D., has withdrawn from the editorial conduct of the Medical News. Prof. Cowling now remains, as in the early life of our able and agreeable neighbor, sole editor, Dr. Cottell being added as managing editor. We regret to lose Dr. Yandell from the editorial lines, but are glad to know that the step was taken in consequence of an increase of professional work of a greater personal importance. Dr. Yandell is recognized as a pointed, forcible, and graceful writer, and in what he did on the News showed much judgment and a faultless taste. The readers of the News are to be congratulated on the fact that Dr. Yandell will continue as one of the regular contributors to our very progressive, marvelously good-humored, and most ably-conducted cotemporary.

A SIMPLE EXPLANATION.—Dr. John Brown, of Edinburgh—he who introduced us all to dear Rab and his Friends—tells the following anecdote: Walking through the grounds of a lunatic asylum one morning, he was accosted by one of the inmates. “You don’t know me,” said the lunatic. “No,” said Dr. Brown, “who are you?” “I am Moses, the lawgiver,” he replied. Ex-

pressing his pleasure at meeting the distinguished legislator, Dr. Brown continued his walk, and after a while fell in with the lunatic again. "You don't know me," he said. "No," said Dr. Brown again; "who are you?" "I am the Emperor Napoleon," he answered. "But," said Dr. B., "it was only fifteen minutes ago that you told me you were Moses, the lawgiver." "Certainly," replied the lunatic; "*that was by another mother!*"

A PURE DRINKING-WATER.—Professors Hofmann, of Berlin, and Kekule, of Bonn, and other chemists have published analyses of Apollinaris water, and all agree in showing that it is a very pure water, with about one quarter the quantity of alkaline salts contained in Vichy water.

FOR ASTHMA.—

R Ammonii bromidi, ʒ ij—ʒ ij;
 Ammonii chloridi, ʒ iss;
 Tr. lobeliæ, f ʒ ij;
 Spts. etheris comp., ʒ j;
 Syrup acaciæ, q. s. ad ʒ iv. M.

S. A dessertspoonful in water, repeated every hour or two during the severity of the attack. (Boston Med. and Surg. Journal.)

A NUMBER of reviews which have reached us too late for the present number will appear in our next.

THE AMERICAN PRACTITIONER.

MARCH, 1881.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

THE PROPER MANAGEMENT OF NATURAL LABOR.*

BY A. D. PRICE, M. D.

The physician being engaged to take charge of a parturient woman he may naturally ask what is the extent of his duty? Where does it begin? With the first stage of labor only? When does it end? With the completion of the third stage? The title which I have chosen for the present paper is in my mind so comprehensive that it can be fairly made to cover the entire period embraced between conception and the conclusion of the lying-in state, and it is in this very broad sense that I desire to present the subject.

For pregnancy, as well as parturition, is a physiological condition. Both require the care and supervision of the attendant, that the progress of the one may be unimpeded and the dangers

* Read before the Central Kentucky Medical Association January, 1881.

of the other avoided, whereby the mother's heart may be gladdened by the cries of the new-born.

The physician's first duty is to ascertain beyond peradventure the existence of pregnancy. Cases of spurious pregnancy are not of infrequent occurrence. Some years ago we were called to a woman supposed to be in labor. She had had morning-sickness and a capricious appetite; menstruation had ceased; the abdomen was enlarged to that of the full period of uterogestation; the movements of the child, she said, had been distinctly felt. She had borne several children, and knew what such symptoms meant. Every thing was in readiness, the advent of the child anxiously awaited, but a digital examination quickly destroyed these fond hopes and joyful anticipations.

Not a great while since a medical man, who subsequently became eminent for his attainments, attended a case of pseudocyesis for three days before he recognized the true condition. The diagnosis of pregnancy possesses an additional interest at the present day, when abdominal surgery has achieved such success. One of our brethren, whose untimely death cut short a most brilliant surgical record, once mistook a gravid uterus for an ovarian tumor and opened the abdominal cavity for its removal. Equally grave mistakes have been made by others also of acknowledged eminence. To determine the positive existence of pregnancy is absolutely essential. "The woman's history, her surroundings, station in life, age, primiparity or multiparity, general condition, and period of gestation," should next be ascertained. The diameters of the pelvis, its excavation, and various planes are to be determined as accurately as possible. "The normality, position, and integrity of the vagina and uterus" call for careful consideration.

On one occasion being called to a primipara we found the upper part of the vagina completely occluded, presenting a smooth, "blind" extremity, which resisted considerable pressure with the finger. The woman had been in labor for a number of hours; the pains were frequent and severe. Having failed to force the finger through the obstruction we passed the left hand

into the rectum—the patient being under the influence of chloroform—to make further exploration, when pressing with the index finger of the right hand, the adherent walls of the vagina yielded and the impediment was overcome. Labor now progressed normally. Her second labor was accompanied by the same condition, while the third was normal.

“The elasticity of the abdominal muscles, the presence or absence of umbilical, inguinal, or femoral hernia; the shape and size of the breast and nipples; and the presence of enlarged or varicose veins,” are to be carefully noted. “The heart, spleen, liver,” and especially the kidneys, demand careful investigation.

The normality of impregnation should be determined. An important and perplexing case came under our observation a few months since, where pregnancy existed with an extra-uterine fetation of long standing. Abortion occurred at the fifth month. An operation was afterward performed for the remaining trouble, but resulted fatally at the end of four weeks from the rupture into the peritoneal cavity of an old pelvic abscess.

The fetal head, its bones, sutures, fontanelles, diameters, and compressibility, and fetus in utero should also be studied.

Pregnancy is not a disease, yet its effects are varied and widely different. One pregnant woman will experience but little or no suffering, while another will endure the tortures and dangers of a nine-months' illness; one will improve in general health and increase in weight, while another will lose both strength and flesh and break down generally. The one or the other of these conditions will usually predominate in proportion to the physical development of the individual.

While the functional disturbances of pregnancy are many, we will invite attention to but one, namely, derangement of the digestive system. This of course varies greatly in kind and degree. At one time it is so slight as to produce scarcely any disturbance; and again so serious as to jeopard life, and make artificial abortion necessary. The nausea and vomiting of pregnancy are most frequent during the early months, recurring occasionally in the latter part of gestation when they are generally

associated with kidney-trouble. "The vomiting of pregnancy is a reflex symptomatic act," but its proximate cause remains unascertained. "Sympathy," morbid irritation of the uterus, distension of its fibers, irritation, inflammation and ulceration of the cervix, uterine displacement and flexions, pelvic irritations caused by the contents of the uterus pressing on some morbidly sensitive spot in that organ, and finally hysteroneurosis augmented in aggravated cases by gastric catarrh—have all been booked in explanation of this always annoying and sometimes dangerous act.

In mild cases a gentle aperient and a little nourishment before rising in the morning will, in conjunction with bismuth, oxalate of cerium, or small and repeated doses of ipecac. be sufficient to give relief. In severer cases injections of chloral and bromide of potash will be necessary; these failing, the application of astringents or caustics to the cervix, or the dilatation of the cervical canal, will be demanded. By the latter method we recently secured prompt relief after other means had failed. It will occasionally become necessary to allow the stomach entire rest, the patient being sustained by nutritive enemata. Artificial abortion remains as a last resort to be produced when the life of the woman can be saved in no other way.

An important duty in the management of pregnancy is the chemical and microscopical study of the urine, whereby indications of treatment are obtained not otherwise to be had. The albuminuria of gestation and "puerperal eclampsia and the various forms of nervous trouble," bear no fixed relation to each other. We find pregnant women in every class and condition of life who are the subjects of albuminuria. Albuminous urine is most frequent in the primipara, developing generally in the latter months of pregnancy. It has been said to be always present in cases of twins. Albuminuria may make its first appearance during labor, "owing to obstructed venous flow from compression by the contractions of abdominal muscles and diaphragm during the pains." Some claim it to be quite frequent during labor, rare before. The exact percentage of preg-

nant women in whom albuminous urine occurs has not been determined. Some estimates place it at four per cent, others much higher. It is at least a frequent complication of pregnancy, and is always "a signal of danger when associated with other symptoms of acute parenchymatous nephritis. The quantity and quality of urine passed should be examined daily, the latter showing the presence of a threatened danger, the former revealing the true extent of the danger." Fortunately a very large number of cases of albuminuria escape convulsions. "The quantity of the albumen bears no relation to the violence of the eclampsia." Pregnancy may be associated with chronic albuminuria. The nephritis generally subsides with more or less rapidity after parturition. If it has been severe, or long continued, or has recurred with successive pregnancies, the chronic form is apt to be established. "The kidney-change is dependent upon an excessive amount of blood being thrown into its structure, more than its efferent vessels can carry off pending the elimination of the urine;" hence "the special proclivity of pregnant women to constant hyperemia of the kidney, which at any moment from interrupted circulation may burst forth as a parenchymatous nephritis."

"The impoverished condition of the blood during pregnancy is an important factor, the nutrition of the kidneys feeling this the more on account of its slow, diminished flow."

The proper management of this important class of cases is of the first importance. By prophylaxis much may be accomplished. Rest, the avoidance of excitement, uniform temperature, diaphoresis and diuresis, hydragogue cathartics, dry cupping, occasional blood-letting in suitable cases, milk diet, and the administration of iron will often carry the woman through this dangerous period. Cases, however, occasionally arise where the induction of premature labor will be demanded in order to save the mother's life. How shall the necessity for this extreme measure be determined? By the amount and character of the urine itself. Whenever the amount of urine falls far below the normal quantity, and grows less and less in spite of appropriate

treatment, the induction of premature labor becomes imperative, the more especially if the child be viable.

The pregnant woman should continue her usual habits; observe the utmost cleanliness; go warmly clad; take regular exercise in the open air; eat wholesome food; secure a good condition of the bowels by proper articles of diet, or by the mildest laxatives; surround herself as far as may be by cheerful society; encourage herself to dwell on the bright side only of the picture, and thus keep down that melancholy which so inclines to rise in the minds of persons in her condition.

The mammæ claim special attention—the nipples if small should be developed if possible and hardened.

The impression is general, both among the profession and laity, that the labors of primiparous women who are old are attended with certain peculiarities and especial dangers. Ahlfeld's deductions, which coincide with those of Cohnstein, are as follows: "1. The labors of old primiparæ are on the whole more unfavorable than those of younger primiparæ. 2. The deficient labor-pains induce a longer duration of the labor, prostration, and nervous excitement, hemorrhages post partum, puerperal diseases. 3. The rigidity of the soft parts, causing slow dilatation of the os, unusually painful contractions, protracted duration of the labor, lacerations and contusions of the parts, hemorrhage from wounds, puerperal diseases, are the two principal reasons for the various anomalies. 4. Operations (particularly forceps) are more commonly required. 5. The children of old primiparæ suffer particularly from the long duration of the labor and the necessary operations. (Of 13.5 viable children in general, only one is stillborn; in old primiparæ the proportion is one 3.1.)"

The obstetrician's attention should in every case of labor be directed to the prevention of puerperal fever, which is not itself an entity, but a surgical fever due to the absorption of poisonous matter coming in contact with bruised, lacerated, or torn tissues. The placental site, a lacerated cervix, a bruised vagina, and a ruptured fourchette or torn perineum render the puerperal woman

peculiarly liable to noxious and poisonous influences. The accoucheur himself should never become the source of infection. While in attendance on cases of puerperal fever, erysipelas, scarlatina, diphtheria, etc. he should decline all obstetrical practice. Believing that puerperal fever is preventable, we hold it to be an incontrovertible proposition that it is incumbent upon the medical attendant to show cause for its existence in any given case. Death from puerperal fever ought, with proper care and attention, to be of the rarest occurrence.

Every pregnant woman should be thoroughly examined before labor sets in, or if, as is too frequently the case, the accoucheur is not called till labor has begun, the examination should be immediately instituted. The position of the child is thus determined, and if faulty, and the labor has not progressed too far, can be corrected, or at least changed to one more favorable. The value of abdominal palpation and external manipulation, as aids to internal manipulation in ascertaining and changing the fetal position, have not that recognition they so justly deserve.

Of the three stages of labor, each has certain demands of its own. During this most trying hour the medical attendant should urge hopefulness and tranquility of mind on the part of the sufferer. The fetal position having been accurately determined, and, when faulty, corrected, if possible, the subsequent examinations should be made only sufficiently often to note the progress of the labor. In the beginning of labor the bladder and rectum should be emptied, and the former kept empty. Too much care can not be exercised in matters of such importance. Our knowledge here must be positive. This the first stage of labor may be much protracted with but slight danger to either mother or child, provided the membranes remain intact; and the woman may sit up or walk about the room, provided the head of the child has entered the pelvis; otherwise she should keep her bed. A rigid os, retarding labor, will often claim attention. This obstacle may usually be quickly overcome by external pressure, digital dilatation, or by Barnes's dilators.

Chloral, morphia, or the inhalation of chloroform, or the injection of atropia into the cervix will quickly overcome this obstacle. When the labor is slow, while the os is thick, soft, and uninfluenced by the pains; when there is nervous excitement which is exhausting the patient, and the uterine contractions are irregular, unduly painful, and ineffectual, or there is a tonic contraction of the lower segment of the uterus around the neck of the child after the escape of the head, the hypodermic injection either of morphia or atropia, or a combination of the two, will often produce the happiest results. The uterine axis should correspond with that of the pelvic brim. Lateral deviations are common, and anteflexions to an extreme degree are sometimes observed in multiparæ with relaxed abdominal walls.

Mrs. D., weighing two hundred and sixty-five pounds, and in charge of an ignorant midwife, had been in labor twenty-four hours when we saw her. She had a knee each upon a chair, and was resting her head and shoulders upon the edge of the bed. Placing her in bed and on her back, the fundus of the uterus lay upon her thighs. The womb was replaced and held in position while the forceps were applied, and the woman delivered of an asphyxiated child weighing fourteen and a half pounds.

The rupture of the membranes, if not spontaneous, should be artificially produced when the os is well and thoroughly dilated. When the liquor amnii is in large quantity and the pains are feeble, making but little or no impression upon the os, rupture should not be delayed.

The integrity of the cervix always claims special consideration. Its laceration should be prevented by its being rendered soft and yielding, if necessary, by the means already alluded to.

If the pains in the second stage become feeble, or irregular, or non-expulsive, or cease altogether, external pressure properly and judiciously applied will often be found effective and safe in hastening delivery. How long should the second stage of labor be allowed to continue? While this is a question of the greatest importance, a definite answer can not be given. It can only be

determined at the bedside and based upon the special indications of each individual case.

The use of ergot at this time is seldom justifiable and often exceedingly dangerous. Here, as a rule, we advocate the use of the forceps—their early use. The woman should not be permitted to be worn out by inefficient pains, her nervous system to become exhausted, the vagina to grow hot and dry, thus endangering at least her soft structures, if not her life and that of the child as well. By too long delay both the mother and child are jeopardized. When “the head ceases to recede after a pain” the use of the forceps becomes imperative. If, after weighing the several indications in a given case, there remains a doubt as to the proper procedure, we advise to cut the “gordian knot” by instrumental delivery. Better use the forceps too early than too late! It can not, however, be too earnestly insisted on that the forceps should never be applied merely because the accoucheur is in a hurry or simply desires to save time.

The management of the perineum is of the greatest importance. Its integrity should be preserved, if possible; and we believe this is possible save in exceptional cases. It should always be examined immediately after delivery, and, if lacerated, closed with silver sutures.

Mismanaged labor has been justly said to be the source of much gynecological practice. Only those who see much of the diseases peculiar to women know how often the perineum is seriously lacerated and what ills follow. Laceration subjects the woman to many dangers. If she escapes septicemia she must sooner or later resort to the gynecologist for the relief of her many troubles. Prevention is every thing. How may this be secured? First, by never giving ergot in this stage of labor; thoroughly empty the rectum; place the woman in the left lateral position when the child is passing through the vulvar orifice; paralyze the abdominal muscles and lessen uterine contractions by the administration of chloroform; press the head, when the vertex is engaged in the orifice, slowly out during an interval of pain; prevent a too speedy expulsion of the child;

draw the head, in manual extraction, slowly through the orifice; prevent the simultaneous expulsion of the shoulders; dilate the perineum between the pains by inserting two or more fingers within the vagina, and making gentle and steady traction; employ Goodell's method, introducing two fingers within the anus and pulling the perineum forward over the advancing head, and pushing the head well up under the pubic arch with the thumb; make lateral incisions when laceration is imminent.

The proper management of the third stage is of paramount importance. After a delay of ten or fifteen minutes the placenta should be expelled by expression, no portion being permitted to remain. By Credé's method and by the administration of ergot, which now should be the rule, the occurrence of post-partum hemorrhage is reduced to a minimum. We make bold to say that no woman should be permitted to die of post-partum hemorrhage, and that in every fatal case it rests upon the medical attendant to show why death was not prevented.

In breech presentations delay the first stage of labor as much as possible. Avoid rupturing the membranes till the os is thoroughly dilated; then, the patient being under the influence of chloroform, the perineum having been dilated as heretofore indicated, and expression being made by an assistant, deliver as rapidly as possible, carrying the body of the child over the pubes on to the abdomen of the mother, and hooking a finger in the child's mouth, thus giving it air, and at the same time assisting delivery by making gentle traction.

In twin-pregnancy the second child should be speedily delivered.

The parturient woman should not be denied the use of some agent to lessen or subdue her sufferings in this her hour of trial. Formerly we gave chloroform whenever the urgency of the case demanded it; now we use it only toward the completion of the second stage, relying upon chloral during the first part of labor. Chloral is safe and reliable, often rendering the use of chloroform unnecessary. It facilitates dilatation of the os, allays irritability, subdues sensibility, promotes uterine contraction, and

thus hastens delivery. Its beneficial action frequently continues for several hours after the completion of labor, promoting quiet and securing sleep.

After delivery make the patient comfortable by putting under and around her dry cloths, and letting her rest for a time, after which sponge and dress her, apply the binder, and give an opiate if necessary. If there is hemorrhage and the womb is well contracted, introduce a speculum and search for a wounded blood-vessel. The patient should not be raised up for several hours, nor worried by having the child put to the breast too soon. She should not be left under an hour, her womb being frequently examined to see that it remains firmly contracted. The bladder demands attention, the catheter often being necessary. Ergot should be administered for a few days, to secure and maintain permanent contraction of the womb and to hasten involution. Ten-grain doses of quinine for the same purpose, and for lessening milk-fever and the susceptibility to septicemia, should be given night and morning for two or three days. A liberal amount of nourishing food should be allowed, the vagina syringed daily till the lochia becomes naturally diminished, and the patient kept in bed or on a couch for two or three weeks. The lying-in woman should be visited often, and her pelvic organs thoroughly examined before being discharged. If a pathological condition exists it should be remedied. Recent advances in obstetric medicine and gynecology have remedied many ills of the parturient woman that heretofore passed unnoticed and rendered life a burden.

The obstetrician's duty is great, ever increasing with the progress of his specialty, and the day has already dawned when his responsibilities cease only with the complete restoration of the lying-in woman.

HARRODSBURG, KY.

THREE CASES OF EYE-DISEASE.*

BY W. CHEATHAM, M.D.

Instead of reading a paper on the subject assigned me in the regular programme of the Society, I beg to report a few cases of diseases of the eye which have come under my treatment in the last two or three years.

Mr. H., of Spencer County, Ky., who was one of the best-known blind men in this State, consulted me some months ago in reference to his infirmity. He lost one eye by a blow from a flying chip; the other was destroyed by a blow from the heel of a companion. He was deaf from the kick of a mule. His misfortunes influenced me in my prognosis. I told him I feared what sight I might be able to give him would not be likely to keep very long, as he is extremely rash in his movements, and continually getting knocks about the head. Being blind in one eye, with very imperfect vision in the other, and deaf to all external noises, he is of course particularly liable to collisions. In Mr. H.'s left eye the sight is nothing. He has weak perception of light in the right. Examination showed all of the cornea, except a small oval space one fifth of an inch long by one eighth of an inch broad on the nasal side, opaque. Behind this clear or rather partially clear cornea was stretched a membrane composed of organized lymph and degenerated iris. I supposed the lens was absent. Such had been the condition of things for thirty-seven years; that is, Mr. H. had not seen an object in all that time. He had during that period some perception of light. He had consulted oculists in Boston and elsewhere, but was told that nothing could be done. I myself was unable to offer him any encouragement, but naturally thought that if the operation which suggested itself to me was unsuccessful there would at least be no harm done. The patient being chloroformed, I introduced the speculum, fixed the eye with forceps, and plunged a Graefe cataract-knife through the cornea and membrane into the vitreous chamber. By a slight

* Read before the Tri-States Society at its meeting in 1880.

seesaw motion I enlarged the wound, when the vitreous, being in a fluid state, began to flow out. This of course complicated matters very much. I attempted to remove part of the membrane by introducing both blades of De Wecker's scissors into the corneal wound, passing one blade under the membrane into the vitreous chamber and the other into the anterior chamber above the membrane. In this manner I made a cut through the membrane the length of the clear cornea. Withdrawing the scissors, I made a similar cut on the other side of the membrane, sloping both cuts so as to almost meet at the apex of the oval-shaped clear cornea. When the second cut was made the triangular-shaped piece of membrane floated back into the vitreous chamber. Just after making the second cut, the lens (thoroughly calcified), being of stony hardness, presented itself. After several attempts with spoon and forceps it was finally removed. When the operation was concluded the eye looked very much shrunk, as a greater part of the vitreous had escaped. The bandage was applied, but had to be removed the following day owing to the pain, which was considerable. Cold cloths were substituted and atropia dropped in the eye. There was not even a perception of light for several weeks. The sight finally commenced to return, and week by week since has gradually improved, and today Mr. H. can read good large print and can go about alone. No doubt the retina or choroid are involved to some extent, as distinct vision exists in but a very small field. To get a good view of objects, it is necessary for him to look intently and to move both head and object till the image of the object falls upon the sound portion of the fundus. This impairment of the perceptive layers can not, of course, be corrected by an operation. Were the perceptive power of the eye all right, he has a pupil good enough to see almost perfectly. The small space in which to operate, the small field of clear cornea, the fluid vitreous, the calcareous lens, not to speak of the length of time of the existing blindness (thirty-seven years), make such a result rather odd and interesting. Mr. H. has difficulty in crossing crowded thoroughfares on account of his deafness. Any

one, even with perfect sight, if totally deaf, would experience some difficulty and dread in making a similar attempt.

Another case of great interest to me was in the person of an old lady of ninety-two years with cataract of ten years' standing. I placed her under the influence of ether, and extracted the opaque lens by Graefe's linear method. The incision was perfect; iridectomy a little large; lens escaped nicely; compress applied, which was not disturbed for two days; at the end of that time compress was removed, eye cleansed, and bandage re-applied for another day. The shade was then substituted and a solution of atropia sulphate dropped into the eye three times a day. The incision was healed the third day. In reference to the healing of an incision, I am never in a hurry. The aqueous humor flowing off prevents increase of tension. I have seen the incision remain open for two or three weeks with good results. Where it remains open too long, the edges may be touched up with either nitrate of silver or sulphate of copper. This case went on to rapid recovery. The old lady now has sight enough to enable her to sew, read, or knit as well as she ever could.

A third case of peculiar interest was a boy twenty-one years old who was born blind. Four operations restored vision to such perfection as to enable him to make a comfortable living for himself and mother.

Case first is remarkable on account of the many years of blindness and the nature of the malady, case second because of the age of the patient, case third because of the congenital blindness of twenty-one years' standing.

LOUISVILLE, KY.

ON THE TREATMENT OF PNEUMONIA.*

BY E. W. KING, M.D.

I hope I shall be pardoned for presenting the following thoughts upon the plan of treating pneumonia into which I have gradually drifted, and advancing certain views which may be thought by some to be not entirely orthodox. Practitioners of the present have long since realized, what our forefathers did not, that pneumonia is a self-limited disease, and that our duty is not so much the combating of the leading symptoms by active and heroic treatment as it is to avert the tendency to death. As has been well said by Jürgensen, "Nature cures, and the only duty of the physician is to maintain life until this cure is effected." The writings and teachings of Flint have had much to do in popularizing and impressing this truth upon the minds of the profession in this country; but as public sentiment is prone to oscillate to the opposite extreme from that which it recently occupied, so has been the thought of the medical profession to go to the opposite of the antiphlogistic regimen, and perhaps too much confidence has been reposed in the powers of nature.

Recognizing pneumonia as a self-limited disease, its pathology a croupous inflammation of the air-cells, with an exudation into the air-vesicles and bronchi forming coagulable fibrinous clots, and that death results, in the majority of fatal cases, as a result of the hyperpyrexia, or from exhaustion and paralysis of the lungs or heart or both, the indications for the management and treatment during the attack are quite clear, viz. to support the powers of life, to combat the hyperpyrexia, and to sustain the action of the respiratory and circulatory systems. The supporting method of treatment in all self-limited diseases is now so generally accepted that we shall not further allude to it. When the accompanying fever runs high, as measured by the thermometer, and threatens dissolution from hyperpyrexia, the cold pack, as advised by Niemeyer and practiced at Bellevue this winter, or

* Read before the Mitchell District Medical Society at Seymour, Ind., Dec. 22, 1880.

the cold bath of Jürgensen, are certainly advisable if the same results can not be obtained by full doses of quinine.

Jürgensen, in Ziemssen's Cyclopedia, claims that "death results from insufficiency of the heart." While this is undoubtedly true in many instances, yet from my limited observation I am led to believe that the greatest danger in uncomplicated croupous pneumonia is in the exhaustion and paralysis of the bronchial tubes in the portions of the lung that are not invaded by the inflammatory action, and that death results more often from paralysis of the lungs from exhaustion than from paralysis of the heart from exhaustion or overwork. In croupous pneumonia the gravity of the case is in proportion to the extent, *cæteris paribus*, of the lung inflamed; not so much from the diffused inflammation as from the inability of the remaining uninflamed lung doing the work for several days that is normally done by the whole respiratory apparatus; and for indications of its failure we look with anxious dread, feeling assured that if we can keep its action free and unembarrassed the disease will soon run its course and recovery ensue. The earliest warnings of this failure are announced to us by the appearance in the healthy lung of râles that partake more of the nature of the sibilant, sonorous, or most usually mucous râles, than of the crepitant or subcrepitant, and indicate a weakness and inability, on the part of the bronchial mucous membrane of that lung, to throw off the accumulated secretion, which prevents the permeation of the air-cells by oxygen for the purification of the blood. To meet this tendency to death, to keep the bronchial tubes free and able to do their work as well as possible under the circumstances, there seems to me that no medicine is more clearly indicated than a stimulating expectorant; and none fulfills that indication better than carbonate of ammonia. Its power to moisten the bronchial mucous membranes and its stimulating qualities have long been recognized, but its applicability to aid the lungs when overworked, as in pneumonia, has not been appreciated as I am convinced it deserves to be. It is in the second stage of the disease that its power is exerted most ben-

eficially, when the inflamed lung is in the stage of red hepatization, when the uninflamed lung is on the verge of exhaustion from prolonged overwork, and the aeration of blood being very imperfectly accomplished, then by keeping the fatigued lung stimulated by stimulating expectorants to a normal action we may be able to tide over the crisis successfully, and the consolidated lung terminate in resolution.

It is very probable that much of the advantage to be derived from the administration of carbonate of ammonia, in addition to its stimulating effect, is due to its action in hyperinosis. As Niemeyer has claimed, and which is being generally accepted by the profession as true, the air-vesicles and bronchi are filled with coagulated fibrin, and some claim that the prodromic symptoms which often precede for one or two days the local manifestations should be attributed to the accumulation of fibrin in the blood. Others contend that it is not primary but secondary, and is caused and augmented by the local inflammation, and is at its height when the inflammation is the highest. Which-ever is true, it is an admitted fact that in pneumonia we have a condition of hyperinosis and a local exudation of fibrin in the air-vesicles of the inflamed lung where it becomes coagulated indicating quite strongly that excess of fibrin is no insignificant factor in pneumonia.

It is also an admitted fact that no medicines have greater power in liquefying the blood, depriving it of its fibrin more rapidly or promptly, than alkalies; and I think no alkali is better adapted to that duty in croupous pneumonia than the ammonia carbonate, combining, as it does, this with its properties as a stimulating expectorant, making it peculiarly applicable.

Its utility then, from this argument, is in the second stage—the stage of red hepatization—and especially when approaching the stage of resolution, when we wish to deprive the blood and air-cells of their excess of fibrin, to stimulate the remaining sound lung up to a point of doing its work, and maintain as perfect oxygenation of the blood as possible, until resolution has become well established and the crisis passed. With this view I

have given it in about sixty cases of pneumonia in the last few years, and now have the gratification of looking back over my notes and finding that not one of those cases under sixty years of age died, and that several who were above that age made good recoveries.

A very common objection to this remedy on the part of the profession is its acrid, pungent, and penetrating smell and taste. This can be obviated and its administration made pleasant by dissolving it in simple syrup, or, as I prefer, in syrup tolu. My usual prescription is—

R Carbonate ammonia, ʒ j;
Syrup tolu, ʒ iss.

M. S. Teaspoonful every half hour or hour, in simple syrup, whisky, or water, as the case demands or patient prefers.

I do not limit myself to the dose of five grains, but have in several cases given it in ten- to fifteen-grain doses every half hour for days and nights in succession where there was threatened exhaustion of the uninflamed lung and the case demanded active and continued stimulation to tide over the crisis of resolution. In several cases which presented indications of heart-failure I have deemed it advisable to combine the general stimulant alcohol with ammonia, and the combination makes a very pleasant mixture and reliable stimulant.

Another objection is that ammonia in large doses is an irritant poison; but I assure you if given largely diluted with syrup it is not an irritant to the stomach, and will seldom be considered objectionable to the most fastidious taste.

In cases in which the prognosis is favorable from the very first, and in which I am satisfied active medication will not be necessary, but where we must do something, even if it is a placebo that is prescribed, I usually give this remedy, knowing that its physiological effects are to the contrary of the pathological condition; and by so doing I am intelligently aiding nature to recover her lost equilibrium, and if prompt action should become necessary I will have accomplished something in the right direction, and be better enabled to accomplish more.

If my theory is correct that the greater tendency to death in pneumonia is from exhaustion and paralysis of the lung that is not inflamed, I shall most assuredly be justified when I decry the use of opium in any and every form in the second stage of pneumonia. I am well aware that by some of our most prominent teachers and authors opium is considered the sheet-anchor, but I am satisfied in my limited experience that it has never done me well, and where I have been induced to give it because of pain or wakefulness I have had good reason to regret my action. In a few instances, in old persons, where the termination was very doubtful, and I have given it to relieve pain, along with its physiological effects evidences of failure of the sound lung were manifested, and the patients sank and died. We all know that one of the earliest effects of opium is upon the lungs, producing a slowness of respiration and obtunding the sensibility of the bronchial mucous membranes. Therefore I should unhesitatingly say that it should not be administered in the second stage, and especially near its close, for fear of inducing a paralysis or impairing the powers of the lung that must carry on respiration until resolution has taken place.

Since writing the above I have had an opportunity to consult Bartholow's work on *The Practice of Medicine*, and I find that he strongly recommends the use of ammonia in pneumonia, and prefers the carbonate for its power to lessen the viscosity and coagulation of the fibrinous clots in the air-cells and bronchioles; but from the remark that the "ammonia solution should be continued up to the crisis," implies that he would limit the time of its administration to the early part of the second stage or during the time the exudation of the fibrin is the most active.

It is, however, during the latter part of the second stage, at the approach of and during the crisis, that I have been most gratified with the vigorous administration of ammonia, and especially in adynamic cases; and theoretically, as well as from experience, I still believe I am justified in my conclusions. If the alkali possesses the power to soften or liquefy the fibrinous

exudate in the stage when it is being deposited, most assuredly will it have a favorable influence during the stage when nature is exerting herself to accomplish the same object, and especially in cases in which the vitality is so low that some assistance is demanded. .

Bartholow's method of administering it is in a solution of liq. ammonia acetatis given every three or four hours. This mixture I do not think is as palatable as that made with syrup; and when we consider the volatile nature of ammonia it is reasonable that its administration should be oftener than once in every three or four hours if we desire to maintain its continued effect on the hyperinosis and fibrinous exudate, and derive any benefit from its properties as a stimulating expectorant.

NEW ALBANY, IND.

USE OF FORCEPS IN OBSTETRICAL PRACTICE.*

BY S. V. FIROR, M.D.

The title of this paper I wish to use in a limited and not in a comprehensive sense; that is, it is not my purpose that it should embrace forceps-delivery made necessary by a contracted pelvis or the occurrence of such complications as are universally-admitted causes demanding the use of forceps, viz. hemorrhage, convulsions, tumors, exhaustion, rupture of the uterus, etc.; but I shall confine myself to a simple plea for an *earlier* resort to the forceps in *natural labor*; and I mean by natural labor that which, though severe and lingering, yet affords no reason for believing that it would not finally be able to complete itself. It is in just this class of cases that we often delay too long, to the injury of both mother and child. I need not say here that the teachings of authors generally are unequivocally adverse to operative in-

* Read before the Tri-States Society, 1880.

terference so long as there remains a chance for unassisted delivery. Certain rules are prescribed which I fear are regarded by the young accoucheur as absolute, and thereby lead to the sacrifice of many children and endanger the lives of their mothers. Allow me to briefly name some of the rules alluded to: "The ear of the child must be distinctly felt;" "the head of the child shall have rested for six hours as low as the perineum;" "when nature, exhausted in ineffectual effort, is unable to accomplish delivery." Now while the dicta of such authorities as Merri-man and Denman and others as ancient may be excused, it is not a little surprising that in the light of advanced obstetrical teachings there still should be found writers reiterating such very antiquated teachings; and while it is true that the more recent text-books discard such teachings, they still counsel delay, and direct that the physician should wait until nature becomes so far exhausted as to be unable to rally sufficiently to expel the child. While the absurdity of the former will be readily admitted, the pernicious effects of the latter have been doubtless impressed upon the minds of most physicians ere they have spent many years in their profession. I can see no reason why such absolute rules should be laid down, unless it be merely to hold in check the ambitious young accoucheur in his desire to gain eclat by an operation, or to restrain his impatience, or still the clamor of meddlesome old women for something to be done. It may be claimed that the common sense which ought to govern every physician will soon dictate how far he should regard such rules as being positive, and therefore suggest in what they should be qualified; yet this knowledge and independence may not come until more than one life has been sacrificed.

During the last decade of my life I have used the forceps in ten cases (just twice the number in which I applied them during the preceding twenty-four years), and in nine out of the ten cases the children were delivered alive and without detriment to either of the mothers. The exceptional case was the patient of a professional friend in Ohio, where the head of the child had been already impacted in the pelvic cavity for twelve hours, with

evidence of the child's death at the time the forceps were applied. Had the delivery been effected six or eight hours earlier the child in all probability would have been alive. I can distinctly recall two cases occurring some years ago, in which the unassisted efforts of nature, being permitted to terminate the labor, resulted in the birth of still-born children with most perfect physical development and bearing all the evidence of recent viability—cases which I am now firmly persuaded would have been saved by the resort to the forceps several hours before delivery took place. For years past I have no longer been governed by a blind obedience to the canons of written authority, but I now endeavor rather to act upon the dictates of my own judgment as applied to each individual case as it arises in practice.

How then can we determine the proper time for operative interference? We may say, when we can secure the greatest safety to both mother and child. This must be resolved upon by the proper exercise of *common sense* in each individual case. We might here suppose, for example, that when the head is in the pelvic cavity, with pains strong, frequent, and of an expulsive character, for several hours, without causing it to engage in the inferior strait or make any advance, or if the head be impacted, or, again, if the head be engaged in the inferior strait and pressing upon the perineum, with the characteristic labor just named, continuing for several hours without making any advance, I would urge the propriety in either case of terminating the labor by the use of the forceps; and this for two main considerations—first, the safety of the child; second, to end the mother's suffering and save her strength. I offer nothing in extenuation of the bungling use of the instrument, whereby injuries are inflicted on either mother or child. The application, when directed by ordinary skill and a well-balanced judgment, will not be attended with any ill effects, and a delivery as above indicated will bring forth a living child, if so at the time, without having received any serious injury. So fortunate an issue could scarcely be looked for if we would wait several hours longer, when the strength of the mother had become exhausted so as

to render the pains nugatory. So much for the child. Now what of the mother? By the early use of the forceps we save her hours of suffering. And who, save those who endure them, can have the faintest conception of the agony embraced even in one half hour of suffering under strong expulsive pains or even in a single pain? How often do those much-to-be-commiserated creatures importune the accoucheur to afford them relief in some way, being in many cases absolutely indifferent as to the means used! Yet how often are they repulsed with the cold and to them seemingly heartless reply, "We must wait on nature!"

Nature is doubtless the same now as at the creation, both in the human family as well as the inferior animals, and as such most admirably constructed to accomplish her wise design in the act of procreation, as asserted by an eminent author.* It must, however, be admitted that her efficiency becomes at times wonderfully impaired either by sinful abuses of her laws or by many of the accessories of our boasted civilization. Beyond this mere relief of the suffering in the woman, we save her wasting strength, and thus place her in better condition to make a more speedy and thorough recovery, besides saving her from the dangers of such traumatic evils as vesico-vaginal, urethro-vaginal, recto-vaginal fistulas, cellulitis, etc., all of which may result from too long-continued pressure of the head upon the soft parts. Emmet, of New York, in a paper read before the American Gynecological Society in 1878, thus states this point: "Instrumental delivery has rarely, if ever, caused vesico-vaginal fistula, but a direct cause is the delay in delivering an impacted head, etc." I am glad to note the fact that within the past few years not only has this eminent authority but a number of our leading men have expressed their approbation of an earlier resort to the forceps.

There are those who still oppose the procedure on the ground that all obstetrical instruments carry with them the idea of mutilation and death. I think, however, that an accoucheur of ordinary tact can soon disabuse the minds of mothers, under their

* Dr. Bedford, *Principles and Practice of Obstetrics*, page 569.

dreadful suffering, so that they would readily submit to any operation promising speedy delivery.

Another objection, which I have alluded to incidentally, is, the injuries inflicted by the unskillful use of the instrument. This I consider scarcely valid. The same argument might be used against many other surgical procedures. The importance and necessity being admitted, should it not be regarded as an imperative duty on the part of the teachers in our schools to so instruct their pupils as to make them skillful operators?

I have but to repeat my gratification, viewed in the interest of humanity, at the change of sentiment in regard to this important subject which has taken place in the minds of many of our leading physicians, and to add that if what I have said should have the effect of inducing a still further change and an increased study of it I shall feel that some good has been accomplished.

CATLETTSBURG, KY.

FOREIGN CORRESPONDENCE.

My Dear Yandell:

LONDON, February 15, 1881.

The "oldest inhabitant" of London would have to vigorously ransack his brain to find a parallel for the present worse than Arctic winter. I believe in my last letter I alluded somewhat in a querulous strain to the extraordinary mildness of the time, and ventured to suggest that it might be in some degree responsible for the rapid spreading of smallpox. Fearfully has the slighted season avenged itself. Snow, wind, hail, and rain have been in fierce contention for the privilege of overwhelming us, and overwhelmed we certainly are. The 18th of the past month was a day the memory of which will ever remain by no means in benediction. A fierce gale blew apparently from every quarter of

the compass at once with an icy sharpness that seemed to cut the very marrow of one's bones, and brought with it a blinding snow-storm that sought out every nook and cranny of one's house, and drifted at times so thickly through the air that the opposite side of the street was completely hidden as by a thick fog. The houses were loaded with snow to such a degree that in the poorer quarters many roofs gave way beneath the weight, causing serious injuries to the inhabitants. The view on the following day from the lines of railway, which in South London run in many parts high above the housetops, was most extraordinary. The houses, like Mr. Mantalini's countess, appeared to have no outline at all. A smooth, white pall was spread in all directions, blotting out the angles of wall and roof with its fleecy covering, while in many places it had drifted so as to completely cover some small cottage, only one wall of which remained visible. Moreover, the empty streets and the broad river, with scarcely a vessel to be seen stirring, produced a very weird effect, which was much increased by the dead silence that reigned every where. The parish authorities having now partially recovered from their panic, are endeavoring to remove the block in the streets, though where the snow is to be put when it is got into carts is a question over which they can wrangle to their hearts' content. The Thames Conservancy Board objects to the river being made a receptacle for it, and the Board of Works has not yet given permission for the parks to be utilized; so at present in the West End the snow is carted into the various squares and there piled up in mountains as high as the lamp-posts. And it is needless to mention the satisfaction with which the inhabitants of the said squares view this proceeding.

Oddly enough, the death-rate has been scarcely affected at all by the extreme cold. The rate of mortality in twenty of the largest English towns was but 23.6 per thousand, while the deaths registered in London showed but a slight increase on the low numbers of recent weeks, and were no fewer than one hundred and sixty-one below the corrected average in the corresponding weeks of the last ten years. Probably the intense

cold has scarcely had time to set its mark on the returns. The next report of the Registrar General will be full of serious interest, as it will undoubtedly afford the means of estimating the fatal effect of the present cold on the national mortality.

A striking feature of the present outburst of winter is the intensity of the frost during the whole period of day and night. For instance, the mean temperature of the twenty-four hours ending at midnight on Saturday the 22d was only 17.6° , while for the four preceding days there was a continuous average of eight degrees of frost. Many startling tales are going about, but nothing more curious have I heard than the following, which I venture to relate, and for the truth of which I can vouch: A firm of merchants in London had occasion to send a check to a house in Glasgow for rather more than a thousand pounds, which check was inclosed in a letter and sent to the post with others. Days elapsed. As no news of it arrived, the letter was given up as lost, when on the seventh day a Thames police constable brought the missing letter and check into the office. It had been accidentally seen as *frozen to a block of ice it was floating down the Thames*. No doubt the clerk who took the letters to the post had dropped the one containing the check out of his hand into the snow without perceiving it. The snow had been carted away and with the letter thrown into the river, whence it had been by the merest chance rescued. Indeed truth is stranger than fiction.

By the way, talking of vital and mortal statistics, Spain has in recent years been one of the few European countries relating to which no satisfactory details have been available. I have seen a monthly return of mortality statistics for November relating to the whole of Spain, which affords conclusive evidence that the value of such information is now fully appreciated by the government. Spain, according to a recent census, has a population of between sixteen and seventeen millions, the population of the forty-nine provinces ranging from ninety-three thousand eight hundred and sixty one in Alava to eight hundred and thirty-eight thousand two hundred and fourteen in Barcelona. The

death-rate is given during the four weeks of November as 2.003 per thousand. This is equivalent to an annual rate of 26.1 per thousand. This rate shows a marked excess upon the average rate during the same period in the twenty large English towns. It is evident, moreover, from the rates prevailing in some of the provinces containing the largest towns that urban mortality in Spain must be excessive. For instance, the November annual death-rate in the province of Madrid was equal to 36.8 per thousand, in Cadiz 34.2, and in Valladolid 34.1. As in most of the southern countries of Europe, the rate of infant mortality in Spain is terribly high. During November alone the mortality of infants under one year of age was equal to two hundred and forty-two per thousand of the recorded births—not far short of twice the rate prevailing in England and Wales. If we may accept these figures as representing an average return, the excess of Spanish mortality is due mainly to the great fatality of zymotic diseases. The returns, on the whole, are most valuable as a contribution to medical statistics, and can scarcely fail to afford invaluable assistance to the cause of sanitary progress in Spain.

As you no doubt know, the question of nerve-stretching in various diseases has lately been brought very prominently forward and strongly advocated. Certainly some of the results are startlingly successful, and the more startling as the rationale of the operation is so far from clear. M. Debove, of Paris, gave an account at a meeting of the Société Médicale des Hopitaux of a case in which the operation had been performed by him for the "lightning" pains of locomotor ataxy. Previously the only drug that gave any relief was morphia. This had been greatly abused, and so great was the tolerance established that the patient felt no benefit when less than three grains were given in the course of the day. The operation was performed first on one sciatic nerve and then on the other, and subsequently on both crural nerves. Three weeks after the operation the patient had not felt one single pain, while the incoördination was greatly improved.

Encouraged by this success, M. Gillette operated on December 16th on a patient of M. Debove. In this case there were, in addition to the more ordinary symptoms, incessant pains in both upper limbs, which underwent exacerbations. The median and radial nerves on the right side were stretched. Since the operation the pain in the right upper limb has much diminished, while in the left upper limb and in both lower extremities it has entirely ceased. The plantar anesthesia has very much diminished, the incoördination of movement is much less marked, and he can now walk without assistance. He refuses to take morphia, saying that "his present pains are as nothing compared with those which he formerly endured."

The method of operating used by M. Gillette is simple. He reaches the nerve by an incision two and a half inches long; passes a grooved director, with the convexity upward, under it; and, grasping the two ends of the director, makes traction in a line perpendicular to the axis of the nerve with force sufficient to lift it about two inches. No fear of rupturing the nerve need be entertained, as it has been found that the radial nerve—to take an instance—will not give way until a force of over ninety-two pounds is applied. It is difficult to understand the rationale of this operation; still, as the result in four out of five cases has been so successful, no further justification for its empirical performance can be needed. That in all the cases the operation has been immediately followed by relief of symptoms, and that in this case improvement in walking and diminution in plantar anesthesia followed stretching of the nerves of the upper extremity, would seem to show that the resulting improvement can not depend upon any structural changes. At present there does not appear to be any guide to the choice of suitable cases, unless, indeed, the fact that all the patients operated on have suffered severely from lightning-pains can be taken as an indication. Time, however, will no doubt clear up this and many other difficulties connected with the subject, and we may not improbably learn that we have included under the one term several correlated but distinct morbid processes.

I have myself lately witnessed the performance of the operation of nerve-stretching. About a week before Christmas a railway signal-man was brought to St. Mary's Hospital with an injury to the hand. He had been knocked down by an engine, which had caught his hand on the rails and had torn off his thumb, index and middle fingers. The wound was slanting across the hand, and took a line through the metacarpal bones. An attempt was made to save the whole hand, and all splinters having been removed and the edges of skin brought together the whole hand and arm were fixed at rest on a splint. Scarcely any inflammatory action followed, and the wounds appeared to be granulating very kindly, when about a fortnight after the accident the patient caught a cold. Symptoms of tetanus began to manifest themselves, and when I saw him were quite unmistakable. The peculiar risus sardonicus was pronounced and constant, while the violent aching in back and abdomen caused great distress. The abdominal recti were firmly contracted and as hard as wood. A consultation was held, when all the surgeons were in favor of either stretching or excising a portion of the median and radial nerves, except one who advised amputation above the wrist—a strange counsel, since, as every one knows, the records of amputation in tetanus are far from encouraging. Nerve-stretching was decided on, and Mr. Pepper, the surgeon in attendance on the case, at once proceeded to operate with his usual consummate skill. The median and radial nerves were successively cut down upon and rapidly exposed. A director being passed below each nerve, it was lifted up and vigorously stretched with two pairs of forceps. The trifling simple incised wounds were then secured with silver sutures and carefully covered. The whole operation was performed with the strictest Listerian antiseptic precautions. (I may say, in parenthesis, that during this time no change was apparent in the original wound beyond slightly-increased suppuration.) For two days after the operation the patient seemed somewhat relieved. He had prolonged sleep on several occasions, though this may have been due to the perfect freedom from any noise

procured for him; but on the third day the spasms returned with great vigor and the patient gradually sank. Chloral and bromide of potassium had been tried in large doses throughout, and later extract of Calabar bean was given subcutaneously. The latter remedy appeared at one time to have a decided effect in checking the spasms. Permission for a post-mortem examination was absolutely refused, but the surgeon was allowed to extract the spinal cord, and we shall look for some interesting details of its microscopical examination.

This is one of the very few occasions when nerve-stretching has been performed for the relief of tetanus, and its failure in this particular instance must not lead to its hasty condemnation as a mode of treatment. The rationale of the operation in the case of tetanus is not much more clear than in that of locomotor ataxy. Of course the great object is, while sustaining the patient's strength, to cut off any peripheral irritation by the wound; and if this is attained by nerve-stretching, well and good. But it is by no means clear that the simple stretching of a nerve is an absolute bar to its conveyance of sensation, which could only be secured by the excision of part of the nerve. The whole subject is involved in mystery, and pure and simple speculation is not likely to do much to elucidate it.

Much honor has been reflected on the profession by the conferring of an "Albert" medal of the first class upon surgeon Henry Grier, M.D., at present stationed at Malta. Lieut. Graham, of the Tenth Regiment, was attacked with diphtheria of a very virulent type, and, as a last resource, tracheotomy was performed on him by Dr. Grier. In the course of the operation, respiration not becoming restored, Dr. Grier applied his lips to the wound and sucked out the obstructing membrane. The extension of the disease ultimately caused a fatal issue. The patient rallied after this and lived for several days, though the medal conferred on Dr. Grier is only a just reward for his devoted zeal.

Frank Buckland, whose lamented death I recorded in my last letter, has been succeeded in his post of Inspector of Fisheries

by Professor Huxley. The post is worth £800 a year, and, it may be added, the duties are not so excessive as to compel the learned professor to resign his other office of Naturalist to the Geological Survey, also worth £800 a year.

The several committees of the International Medical Congress are busily engaged preparing for the meeting here in August. It is understood that great numbers of medical magnates from our own and other countries will not only lend their presence to the occasion, but contribute papers as well. All of us here hope "the States" will show up strong at the meeting. Of course we expect you.

I must ask you, my dear Yandell, to excuse a longer letter this time. I have been suddenly summoned to the south of France, and have much to do before my departure. I hope to be back in time for my next letter and to bring back some notes which may prove of interest to your readers.

Reviews.

How to Use the Forceps: with an Introductory Account of the Female Pelvis and of the Mechanism of Delivery. By HENRY G. LANDIS, A.M., M.D., Professor of Obstetrics and of Diseases of Women and Children in Starling Medical College. New York: E. B. Treat, Publisher, 757 Broadway.

This modest duodecimo of one hundred and sixty-eight pages, dedicated to Dr. Ellwood Wilson, is the expansion of an article published in the *American Journal of the Medical Sciences*, April, 1876. It is divided into two parts—the first, *the mechanism of labor*; and second, *the forceps*.

In the first part Dr. Landis's widest divergence from the teaching of obstetric authorities is as to the plane of the superior strait; for it is not, according to our author, one surface, but two—"the outline of the inlet is compounded of two partially superimposed ellipses similar to the outline of the fetal head."* Thus there are two obstetric canals commencing at the pelvic inlet, which merge into a single one at the pelvic outlet. Dr. L.'s ingenious theory and careful reasoning in this regard can not be fully appreciated without the accompanying diagrams and without careful study.

In presenting the mechanism of delivery, or, as we would prefer saying, the mechanism of labor, Dr. L. has introduced a good deal of purely elementary knowledge, but seems necessary in order to present the author's peculiar views. In the course of this presentation Nagle's *obliquity* is upheld. Undoubtedly the anterior parietal protuberance seems lower than the posterior, but does it not merely *seem* so because more readily accessible to the examining finger—the fact apparent rather than real?

* But what is the outline of the fetal head? If one of the planes of the fetal head, how can *two* ellipses resemble it? There seems to us some obscurity in the definition.

On page 56 Dr. Landis refers to restitution—a designation which we supposed most obstetricians had abandoned. If such an intra-pelvic torsion of the neck occurs as restitution requires to have taken place, then this restitution should immediately follow the delivery of the head; but it does not. It does occur, however, when uterine contractions compel the shoulders into the antero-posterior diameter of the outlet. The external rotation is needless in itself, and is only the sign of a necessary internal rotation.

The author states, pp. 58, 59, "The delivery of the head is frequently followed by a more or less temporary cessation of uterine contractions. Under such circumstances the child may be in danger of asphyxia from pressure upon the funis, if the body is large or the funis wrapped around the neck, so that an immediate delivery of the shoulders by the physician is to be recommended." We would rather say that usually, almost invariably, there is a cessation of uterine contractions after the delivery of the head; but then contractions generally return within two or three minutes, so that it is very rarely necessary to resort to artificial delivery of the shoulders. And when these contractions fail would it not be better to stimulate the uterus by abdominal friction, or resort to *expression*, using a *vis a tergo* rather than a *vis a fronte*?

But we must pass from the first to the second part of this volume. The first pages of this part are devoted to a description of the forceps, especially of that known as Davis's. Of this particular instrument Dr. Landis seems almost enthusiastic in his admiration, and we heartily share in that admiration. Dr. L., by the way, will put a fenestrum in the forceps-blade, but unfortunately fenestrum, whatever it may be, is neither Latin nor English.

In considering the application of the forceps, our author strongly advocates applying them to the sides of the fetal head, not with reference to the sides of the pelvis. But if his favorite were some other instrument than that of Davis—Simpson's or Elliott's, for example—would this advocacy be so strong? The

"Davis" is for the sides of the fetal head, and, we almost add, should never be otherwise used. In reading Dr. Landis's excellent rules for the mode of applying the forceps, we find these words as to the blade: "It is to be passed almost exactly as we would pass a male catheter into the male bladder." How unconsciously almost the very direction of one of the old masters is reproduced! Levret, writing more than a century ago, described the introduction of the forceps-blade as *par le moyen d'un mouvement assez semblable à celui q'on fait quand on sonde les hommes par-dessus le ventre*.

As to the direction and method of traction we give the following quotation:

Among the first to have a practicable doubt as to the possibility of making traction upon the handles in the proper direction was Tarnier, who accordingly invented a pair of forceps with a considerable pelvic curve, which was fitted with steel rods affixed to the lower edge of the blades, so that we could pull in the line of the blades and not in that of the handles. This is an unnecessarily ingenious contrivance, since we possess in the ordinary forceps all that is necessary if we will use them properly.

The method which seems to me the correct one I will now attempt to describe. When the forceps are applied at the inlet the handles are seized by the right hand from above and held firmly, compressing the head as little as possible at first. The left hand is placed so that the ball of the thumb comes over the lock, while the index-finger rests upon the upper arm of one blade and the middle finger upon the arm of the other. Now while the right handle holds the head almost at rest, the fingers of the left *push* upon the blades so as to move them and the contained head downward, backward, and a little to the left of the median line. Secondly, while the fingers are pushing down in this way we may also make use of them as a fulcrum, and by elevating the handles cause the blades to move in an opposite manner; but care must be taken that the force thus applied is not enough to overcome the downward pressure of the left, else we will merely extend the head without propelling it.*

These directions doubtless are excellent, are worthy of remembrance and application. But did not Nagle, and before him

*No *vis a fronte* propels.

Deiander, recommend methods somewhat similar for the same purpose? Nevertheless Dr. L.'s is simpler and more readily applied, and, if equally efficient, therefore better. As to the first statement in the extract, viz. in reference to the priority of Tarnier, the perineal curve which Johnson gave his forceps, 1769, sought to bring the line of traction in the axis of the canal. Hubert's forceps, 1860, were seventeen years in advance of Tarnier's; and, still further, according to Stoltz, Hermann's, 1842, exactly resemble the latter.

Dr. Landis states that we may decide when to abandon the forceps for the perforator by the condition of the mother. But ought not that of the fetus to be considered? for if, for example, it be dead, why prolong the mother's suffering? and, on the other hand, if it be living, but death imminent, as revealed by auscultation, why not use a little more force and hasten delivery? Dr. L., apparently founding his belief upon the statements of Poppel and Kristeller, that a force of from four to eight pounds is often enough to expel a head that had lain immovable for hours, alleges that traction in the right direction need not be very forcible. We are not sure this is true for the majority of cases in which instrumental delivery is necessary. The very accurate researches of Poulet (*Archives de Tocologie*, February, 1880) seem to show that the maximum force of expulsion does not exceed twenty-five kilograms or about fifty-three pounds, and we can not see well how artificial delivery can be frequently effected by a force so much less as is four or even eight pounds.

The directions given as to the forceps for compression are excellent. But when he comes to the question of *leverage* we doubt whether his views will be sustained, although he strongly fortifies them by quoting the able paper of Dr. Albert H. Smith, which is found in the third volume of the Transactions of the American Gynecological Society.

In giving a series of rules as to *when* the forceps should be used, the following language is used: "Whenever the second stage of labor has lasted two hours, and the head is still stationary or advancing with great slowness, we should inform the

patient we are about to apply the forceps." So far as the first condition is concerned, it may be the time is too long, and as to the second too short. One of the best obstetric practitioners we know had a resulting urinary fistula where the head was stationary half an hour; and in those cases where the progress is very slow, the conditions of mother and fetus being good, a delay of more than two hours in applying forceps will not be injurious. When to use forceps, is one of the many obstetric problems for which arithmetic gives no solution.

But we must terminate this notice, and we do it heartily thanking the author for his valuable work—a work in which we find much more to believe than to doubt or deny, much more to commend than criticize. Its author has had the originality and boldness to break with some long-established obstetric traditions, to criticize some of the ablest obstetric teachers, and the future will decide as to whether all the positions he has taken will be sustained.

Differential Diagnosis: A Manual of the Comparative Semiology of the More Important Diseases. By F. DE HAVILLAND HALL, M.D., Assistant Physician to Westminster Hospital, London. Second American edition. Extensive additions. Edited by FRANK WOODBURY, M.D. Philadelphia: D. G. Brinton. 1881. Octavo. Pp. 222.

This work is divided into two parts. Part first treats of the fevers and diseases of the blood; part second of diseases of the nervous system, diseases of the respiratory apparatus, diseases of the circulatory apparatus, diseases of the digestive system, and diseases of the urinary system. One thing especially to be commended is the arrangement of the symptoms of diseases likely to be mistaken for each other in parallel columns, so that a differential diagnosis is rendered more easy. This plan is observed throughout the book. This edition is an improvement on the first, and stands next to Da Costa.

Clinic of the Month.

SOME PRACTICAL POINTS IN DIGESTION.—Dr. J. Milner Fothergill, in *The Practitioner*, says :

All digestion is a process of solution by hydration ; that is, as starch is converted into sugar by adding a molecule of water to it, under the action of a ferment, so the albuminoid "proteid" is converted in the stomach into a "peptone" by a like process of hydration. It is easy to see that our food could not very well be stored in soluble form by the vegetable world, which from ammonia, water, and carbonic acid builds up for us starch, sugar, albuminoids, and fats. If soluble in water they would constantly be dissolving in rain. So they are insoluble; and the digestive act renders them soluble, so that they can pass from the intestinal canal, through its walls, into the blood first, and from it again to the viscera and tissues. Let us take the career of starch. The act of bursting the starch granule open by cooking is a preparatory act of no little value in lessening the demand upon the digestive processes. This is illustrated by the practice of advanced agriculturists who cook the starchy matters of the food of their stock or ferment them by brewer's grains. Under the influence of the ferment of the saliva starch is converted into sugar. This ferment is known as "diastase;" and an identical "ferment" is produced in the process of malting barley, where the starch of barley is "hydrated" into malt. This barley ferment is now largely used medicinally for ill-nourished infants and invalids, and very useful it is. But the manner in which the makers instruct us to use it in their appended labels tells how little is really known of the body ferments. On huge gallon bottles of maltine we read that a teaspoonful must be taken after a meal. Now, as it happens, "diastase"—whether from saliva or barley, it matters not—is inactive in the presence of an acid, and taken into the acid stomach as directed it is inert, simply thrown away so far as it is a ferment, and reduced to the level of other food—no longer a digester, and itself to be digested. It is in the brief time before starchy matter reaches the acid stomach that "diastase" is active and functionally operative. What starch reaches the stomach is, in all probability, left to be digested by the action of the pancreatic ferment.

Well, now, what practical lesson is taught us by the possession of this physiological information? In the first place, it tells us that children and dyspeptics, as well as invalids, should take their food slowly. It should not be bolted, even when simple milk and porridge; it ought to be well chewed in the mouth and thoroughly mixed with saliva; in fact, time must be given for the saliva ferment to act upon the starch, in order that it may be operative indeed. And this brings us to a matter on which a few words may be said with advantage.

All digestion is a process of solution, but for proper perfect solution disintegration is essential and indispensable. The food, no matter whether starchy, albuminoid, or fat, must be reduced to tiny minute particles before the ferments can act efficiently. We grind our corn before we cook it. We disintegrate it before it is subjected to a process which chemically affects it. That is, so much "digestion" is actually performed upon the food before the digestion of the body is brought to bear upon it. So we cook our flesh in order to make it less tough; that is, in order to make the tiny fibrillæ of the muscles fall more readily asunder. This reduces the act of chewing very considerably, and so reduces the work of digestion. The flesh of the pig and calf is especially indigestible because it is not readily disintegrated, as dyspeptics know to their regret when they have been indiscreet enough to partake of either, often when some persuasive woman's voice has persuaded that "that *little* piece can't hurt you." These persuasive women are valuable allies for the profession! Cooking and mastication then reduce the labor of the stomach in disintegration. And again, we see how bad teeth and habit of eating rapidly lead to indigestion. With bad teeth mastication is imperfectly performed and disintegration by the movements of the stomach rendered more difficult and also painful. The digestion in the stomach is thus converted from a painless, rather comfortable matter to a painful and uncomfortable matter. The food should then be thoroughly chewed, for divers reasons.

Now we can profitably return to the matter of the effects of artificial diastase. It is quite clear that children and invalids should be taught to eat slowly and mix their food patiently with saliva. The dairy farmer's wife and maids used of old to patiently feed their calves "off the finger;" that is, they made the calves lick the milk from their fingers, and so it got well mixed with saliva. But the increasing pace at which we live has reached the slow-going agriculturist, and now the calves are allowed to bolt their milk, with the natural consequence of too firm curds in the stomach, diarrhea to get rid of them, a bottle of medicine to stop nature's efforts, and an increased mortality among calves. So when children do not eat slowly their digestive processes

are embarrassed; and especially is this the case where the milk-teeth are decayed.

Then, again, in order to aid the defective action upon starch by the natural diastase being deficient in quantity or impaired in power we add the artificial diastase "maltine." But, as Dr. Roberts points out, in order to make this ferment operative it must not be taken after a meal is over. Rather it should be added to the various forms of milk porridge or puddings before they are taken into the mouth. About this there exists no difficulty. Maltine is a molasses-like matter, and mixes readily with the milk, gruel, etc. without interfering either with its attractiveness in appearance or its toothsomeness; indeed its sweet taste renders the gruel, etc. more palatable. A minute or two before the milky mess is placed before the child or invalid the maltine should be added. If a certain portion of baked flour, no matter in what concrete form, were added to plain milk and some maltine mixed with it before it is placed on the nursery-table, we should hear much less of infantile indigestion and malnutrition.

And one practical point must be well borne in mind. In the present *furor* for fluid beef-juice now much prevailing, beef tea—the stronger the more beneficial, of course think the laity—of Liebig's extract, etc., the necessity for starchy matters is being quite overlooked, or, to be very safe, underestimated. These meat products furnish—the best of them—little glycogen or animal starch, and yet that is the fuel-food of the body *par excellence*. We must be more guided by rational knowledge, by physiology, and not by fashion, in our dietetics. When there is a very feeble digestion then the digested milk and milk gruel advocated by Dr. Roberts must be employed. Full directions for their preparation are provided along with each bottle of the *liquor pancreaticus* which he advocates for artificial digestion.

Such preparations are indicated when milk curdles too firmly in the stomach, and the resultant curd resists the solvent action of the gastric juice and passes per anum in such quantity that it can be seen in the stools. Whether in typhoid fevers or other conditions, it is well to attend to this point. For solution disintegration is indispensable. If the curd formed in the stomach is too firm to be broken to pieces, then the milk can not be digested. When such firm curdling is present, whether in child or adult, then it must be dealt with. In milder cases equal quantities of milk and lime-water, with a teaspoonful of baked flour mixed in each pint, will check the excessive curdling. Here the particles of the flour mixed with the milk undergoing the curdling process mechanically render the curd less firm and tenacious. If the acidity be still more pronounced then it may be necessary to

mix ten grains of prepared chalk or five grains of carbonate of magnesia to each pint of milk, or milk and water, along with the baked flour. If beef tea or mutton-broth be taken it is well to add to each pint a teaspoonful of baked flour, or fine oat meal, or maize flour, or even some boiled arrow-root, which is very thin. Such addition is requisite to give the meat extract a higher food value.

Then comes the question of the digestion of albuminoids. Under the influence of the gastric juice an insoluble albuminoid, a "proteid," is converted into the soluble "peptone." As such it passes into the blood, where it at once passes back to proteid form. This digestion into a "peptone" is achieved by the addition of a molecule of water, and as soon as the soluble peptone has reached the blood it is dehydrated back to a proteid. This is the special function of the stomach, viz. to digest albuminoids. And here again we see that disintegration is essential to solution. If the albuminoid be flesh it must first be cooked, which makes it tender, so that one minute fibril readily parts from its next neighbor. And as persons advance in years they usually prefer their meat well done, while youthful appetites like underdone meat generally. Then it must be masticated so as to thoroughly break down the separate fibrillæ. If these two preparatory operations have been imperfectly performed, then the work of the stomach is increased. Hence the movements of the stomach are active and prolonged, so that the individual becomes conscious of them. This is the indigestion of "imperfect disintegration." This form of dyspepsia is very amenable to treatment, and the indications are plain enough. Suitable food must alone be taken. Mastication must be efficient and careful. If the teeth are decayed the dentist must be consulted, and false teeth, if necessary, supplied. Practically milk-puddings, with or without stewed fruits; "steam-cooked crushed cereals," to be procured of leading grocers; fish, especially short-fibered white fish, and the white flesh of fowls, are to be preferred. Let the time spent at meals be sufficient for proper mastication and the mixture of the saliva with the starchy or glycogenous matters of the food. By this last the starch is converted into sugar, which, being soluble, passes from the stomach to the blood, and the gastric digestive act is not embarrassed by the presence of too much starch. These little matters reveal their practical importance under the bright light which advancing physiology is throwing upon them. They have long been known to careful clinical observers empirically and as matters of fact, but now we know them scientifically, which reveals their importance to all. Thus perfect disintegration is essential in all cases of dyspepsia. After that comes the question of "solution."

Digestion is really solution. The gastric juice is the solvent of the albuminoid elements of our food. Now when this juice is secreted in insufficient quantity or is impaired in quality, then the solvent process does not progress properly. We have then indigestion from imperfect action of the gastric juice. Having secured for the patient a suitable dietary and as perfect disintegration as the circumstances of the case will permit, we come to the next matter, the gastric juice. We must secure more gastric juice or a better quality of it. For this end we stimulate the secretion by appropriate measures, or we employ artificial digestive agents procured from outside the organism. For the purpose of whetting the appetite, and thus acting reflexly upon the gastric secretion, we employ the class of agents known as bitters. To these we add hydrochloric acid. Ringer has pointed out how an alkali, taken into the stomach before a meal when the stomach is alkaline, produces a freer flow of acid afterward. Consequently we comprehend the value of that well-known preparation indifferently termed "haust. stomach" or "mist. mirabilis" or "mist. rhei et gentian" in the various hospitals—a combination of world-wide fame. One drawback to this combination of rhubarb, gentian, and soda is that the student becomes familiar with it and its virtues, but remains ignorant of its exact composition, and so loses sight of it when he enters upon practice for himself. Such a mixture before meals, followed by ten drops of hydrochloric acid after the meal, will often make the difference between imperfect digestion, producing discomfort, and digestion so perfect that it does not provoke consciousness. Or where there is much irritability in the stomach—that is, when a bare, red tongue, imperfectly covered with epithelium, suggests a like condition of the internal coat of the stomach—then bismuth is most soothing. The mixture of soda, bismuth, and calcimba is in use for such indigestion, with good results. The dietary in such a case should consist of the blandest food, milk with or without baked flour in it, beef tea with baked flour; nothing more till an improved condition of the tongue tells of a more normal condition of the stomach. In such cases a plain opium pill at bedtime often soothes the stomach very nicely. Then there are cases where imperfect digestion is accompanied by the production of fatty acids, butyric and others, which add the phenomenon of "heart-burn" to the symptoms; or they may be later products formed, which cause the bitter hot taste in the mouth on awakening in the morning or after a post-prandial nap. It is usual to treat "heart-burn" by the exhibition of an alkali, but this is not good practice. In union with an alkali the offending matter is nearly as objectionable as in the form of free acid. It is much better to give a mineral acid, as the hydrochloric or

phosphoric, which breaks up the feebler organic acid. By such means we can aid the digestive act. Then at other times the indigestion is due to lithiasis, where the presence of uric acid impairs the efficiency of the gastric juice. In these cases all measures which do not enter-tain the causal relations of the dyspepsia are of little use. By the administration of potash in a bitter infusion well diluted, taken half an hour before a meal, this element of trouble is removed. In all cases of gouty persons suffering from dyspepsia, do not forget this cause of impairment of the gastric juice.

Having thus cleared the digestive act of all impeding factors, there comes the question of direct stimulation of the flow of gastric juice. We know that there are agents which in considerable quantities excite inflammation of the coats of the stomach, and which, when taken in medicinal doses merely, increase the vascularity of the gastric mucous membrane, and so stimulate the flow of gastric juice. Such agents we possess in arsenic and ipecacuan and certainly alcohol. The action of the latter is often excellent in weak digestion, either taken with the food or as a fillip to the appetite immediately before food. This is seen in "the nip of gin and bitters" so commonly taken before dinner by men who wish to thoroughly enjoy their food.

Ipecacuan formed a portion of a good old-fashioned dinner-pill, and between its direct action upon the gastric mucous membrane and its action upon the liver as a hepatic stimulant it must come into use again before long. A dinner-pill of

Pulv. ipecacuan.	gr. j ;
Strychniæ		gr. $\frac{1}{20}$;
Pulv. pip. nig.		℥ ij ;
Pil. al. et myrrh		gr. ijss.

every day will often produce excellent effects. Then arsenic may be taken as three drops of Fowler's solution after dinner, or in the above pill substituting the same dose of arsenic for the strychnine.

Beyond these measures lies the use of artificial pepsin. Pepsin, if properly prepared, will digest albuminoid bodies outside the body. The pepsin of the pig or calf is potent within the human stomach. But as pepsin only digests albuminoids in an acid medium, it is clear it must be given shortly after a meal. And from what has been said before it is quite clear that in each case the medical attendant must distinguish between the indications for giving maltine to digest starch and pepsin to digest albuminoids. There is room for fear that this distinction is not invariably made as carefully as it ought to be made. Yet it is evident that in every case such discrimination is necessary for its right management, and it will not do to give maltine or pepsin

indiscriminately. By careful attention to these different matters, clearly distinguishing the indications for treatment in each case, the difficulties can usually be surmounted successfully; but it is by no "happy-go-lucky" plan, or, rather, want of plan, which will enable the practitioner to so diet and treat these patients as to be generally successful. A chance success here and there may be attained, but systematic success can only be hoped for by systematic study of the subject.

All this time fat has never been discussed. The digestion of fat is not effected either by the saliva or the gastric juice. It is a mooted point yet how far some portion of the fat in the stomach may not be broken up into fatty acids and glycerin, and that these fatty acids may aid the bile and the pancreatic juice in the emulsionizing and saponifying of the rest of the fat. But the digestion of fat takes place beyond the stomach, to speak broadly. When the contents of the acid stomach pass the partially-relaxed pyloric ring they come into contact with the bile and are rendered alkaline, and then the action of the pancreatic secretion comes into play. About this last matter older practitioners know little. That is not their fault, however. The subject is one which has been cleared up since their student days. The pancreatic secretion contains four principles: (1) a ferment which changes starch into sugar; (2) trypsin, which digests albuminoids in an alkaline medium; (3) a substance which will curdle milk; and (4) another substance which will emulsify fats. Consequently, contrary to what is thought by many, it is beyond the stomach that the greatest digestive activity occurs. When the contents of the stomach pass into the small intestine the pancreatic secretion commences its operation. The remaining starch unconverted into sugar by the saliva is acted upon now once more, the albuminoids not already digested by the gastric pepsin are digested by the pancreatic trypsin, while the fats are emulsified so that they can be taken up by the lacteals in the villi of the intestines. Here then we have digestive activity in its most pronounced form. But of indigestion here we as yet know nothing; we merely know that fat is not digested in certain cases. Yet there are some matters connected with the digestion of fat which are not made as much the subject of thought as they ought to be. There is the broad fact that cod-liver oil, cream, butter, the liquid portion of fried bacon, are the most digestible fats; that these can often be assimilated when the ordinary fat of meat is not digested and is turned from with loathing. Many a child will reject with disgust the fat of meat, so sweet and toothsome to many persons with good assimilative powers, and readily take cod-liver oil, admitting that the latter is not attractive

by its taste. There is clearly something here in the albuminoid envelop of the animal fat. Fat, as found in the bodies of animals, consists of connective corpuscles crammed with fat globules. Before such fat can be digested the albuminoid envelop must be removed. How far this film of connective tissue interferes with the digestion of the fat contained in it, we can not yet say. But the facts stand in a very suggestive relationship.

Now what means have we for influencing this portion of the digestive act? Again we may stimulate the pancreas or fall back upon artificial pancreatic secretion. For the purpose of stimulating the pancreas we possess one agent alone of which we as yet have any knowledge. This is sulphuric ether. Dr. Balthazar Foster, of Birmingham, first brought forward ether for this purpose, giving it with cod-liver oil, where the oil alone did not seem to be assimilated. This work has been corroborated by the report of a commission appointed in the United States of America to investigate the matter. It is certainly a measure well worth trial in cases where pancreatic digestion is impaired.

Then there is the use of pancreatic secretions obtained from that useful omniverous animal, the pig. These, if well made, are of great potency, and are not objectionable in taste. We all know that Dr. Horace Dobell has long had before the profession a "pancreatic emulsion" for the treatment of phthisis especially. There can be little if any doubt about the fact that it is the imperfect assimilation of fat which impairs "interstitial digestion" in the body. This impairment gives us those modifications of nutrition which are summed up in the word "struma." We know that if we can manage to enable a patient with pulmonary phthisis to digest and assimilate cod-liver oil, tissue-nutrition becomes so altered that the development of tubercle is usually arrested. That is, we have once more given to growing tissue that fat which is essential to healthy formation. Call growths of tubercle by what name each man pleases, Virchow's broad view that tubercle is a growth of connective-tissue corpuscles degraded in quality, while produced in great quantity, is the one to hold in order to best grasp the subject from its therapeutic aspect. What we have to attempt to do is to give to the tissues the fat without which they are not healthy. Now the perusal of the foregoing remarks will tell every reader—him that reads and runs, as well as him who reads slowly—that in the treatment of tissue malnutrition, whether of phthisis or some other form, there are many points to be attended to beyond ordering cod-liver oil or change of air. The last, as being directed almost solely to the effect of the inspired air upon the lining membrane of the air-tubes locally, is a very narrow and limited view of phthisis; and it is desirable that

the doctors who sing the praises of different health-resorts should know a little more of general medicine and be a little less taken up with the atmospheric disturbances and the mere number of hours of sunshine of different localities. For instance, a young lady was sent to Davos the winter of 1878-79 and came back considerably improved. She after that came under my notice professionally, and I put her upon a course of pills containing arsenic and iron. On this she improved nicely, and I insisted upon her continuing the medicine during her stay at Davos last winter (1879-80) so as to derive the maximum benefit for the heavy expenditure. But when she got to Davos her doctor stopped the medicine without any communication with me in the matter. What are the consequences? She comes back in such a condition that her mother gives her the pills again, on which she soon improves. Now will any reasoning being believe that if that course of arsenic and iron had been continued during the stay at Davos the girl would not have been all the better for it?

In tissue-malnutrition it is not sufficient to merely order cod-liver oil and change of air, as is evident by what has gone before; but to first see that the digestive and assimilative processes are going on properly; that the food contains the requisite quantities of nutritive power with ready disintegration; that the natural digestive ferments are encouraged or supplemented by artificial ferments; and then comes the question of the assimilation of fats. The last is the crowning point of the therapeutic edifice, not its foundation. It should not be the first thing done to order the cod-liver oil, but to lead the organism up to its ready digestion, and ultimately to that of other less digestible but more stable fats. Then it is of the utmost moment always in disease to watch the condition of the tongue and the humors of the stomach. However capricious the latter, it must be humored and conciliated; and whenever the tongue becomes denuded of its epithelium or is covered with a layer of dead epithelium, the plan of treatment must be at once suspended; and if nausea or eructations follow the oil, then for a time it must be withheld. No matter how tantalizing to see a satisfactory progress checked, submission to the stomach is essential. To pursue the same line when the stomach is disturbed, is not good generalship. To retire for strategic purposes is not always the equivalent of defeat; it may be a wise and prudent maneuver. Very often indeed the ultimate result of a case hangs upon the readiness with which this strategic maneuver is executed. It is to be feared that the clinical skill of a generation or two ago in these matters of apparent minutiae have been largely forgotten by a race who study disease in the dead-house, and who look at tissues, healthy and diseased, too exclu-

sively through a microscope. When the stomach will not tolerate milk, or milk and seltzer-water, or lime-water, even in small quantities, and great discomfort, only relieved by vomiting, follows any ingesta, then the case is very serious. In such cases then we may fall back upon the artificially-digested milk and milk-gruel of Dr. Roberts. Full directions are given along with each bottle of the liquor pancreaticus, without which the artificial digestion can not be carried on; so they need not be repeated here. Further, a nutritive enema with the requisite digestive ferment in it is also described on the wrapper. It is not only that Dr. Roberts's work is good and sound and valuable in itself, but it has a further and an almost priceless value in its suggestiveness and the thought about the matter of digestion in the minds of others which it is exciting.

SWAYNE ON LACERATION OF THE CERVIX UTERI.—Dr. Joseph Griffiths Swayne, of Bristol, contributes to the final number of the *Obstetrical Journal of Great Britain and Ireland* an article upon the treatment of laceration of the cervix uteri.

In the introductory observation he says, "The extraordinary success achieved by the happy audacity of men like Sir James Simpson induces other experimenters to come to the front who with his boldness, but without his genius, venture upon new and untried paths simply because they are new and untried, and mistake innovation for improvement." Then follow some statements as to cauterizing, slitting, and stitching the cervix; and he states that he has been led to make these remarks in consequence of a paper which was read at the last annual meeting of the British Medical Association.

Dr. Swayne admits the statement of Dr. Pallen as to the frequency of cervical lacerations, but he denies their significance. Further on he suggests that the evil consequences of these lesions may be greater in America than in England, partly due to difference of climate and habits of life, and partly due perhaps to the "greater prevalence" in this country "of unlicensed practitioners of midwifery." "Prevalence" is good. Unlicensed practitioners of midwifery, according to Dr. Swayne, predominate in this unhappy country! And yet this country supports two journals devoted especially to obstetrics, while our British and Irish

cousins can not support one; indeed if they had given an equal support to that which the American profession gave the Obstetrical Journal of Great Britain and Ireland its discontinuance with the December issue would not have been required.

Dr. Swayne concludes as follows: "I must express my conviction that in this country, at all events, conservative surgery, such as Dr. Pallen recommends, is very seldom necessary; and I feel sure that most British practitioners would only have recourse to it as a *dernier ressort* when milder methods of treatment have failed. In gynecology, as in statesmanship, the truest conservatism often consists in 'letting well enough alone.'"

Now we do not believe in such inferiority of American obstetrics as Dr. Swayne does, nor do we believe in habits of life or climate furnishing an explanation of the alleged injurious consequences of cervical lacerations. It is not essentially a question of race, of country, of climate, of practitioners. Some of these alleged relations do not enter at all; others are incidental. And no theoretical consideration can set aside the established facts of Dr. Emmet and others as to the beneficial results of the operation which Dr. E. devised and first executed. Until Dr. Swayne observes the operation in suitable cases and its consequences, he is not a competent witness. Mere opinions can not nullify facts.

Finally, let us say that there is great danger of the operation being unnecessarily performed; that generally is the fact in all new therapeutic means proposed and upheld by recognized authorities. But the evil is self-corrective, and after a while this treatment will be assigned its clearly-defined limits.

FALSE DYSPEPSIAS.—Germain Sée, in a communication to the Academy of Medicine (*Archives Générales de Médecine*, February), gave first the characters from a chemical basis of true dyspepsia. Sometimes the gastric juice is altered as to the proportion of its constituents, hydrochloric acid and pepsin; one or the other may be deficient; the pepsin may undergo modifications of solubility, of quality, of functional energy. Sometimes the gastric juice is, as in mucous catarrh, mixed with a

certain quantity of mucous, which in a certain degree prevents its action. Sometimes the pepsin is prevented from acting certainly by the product of the metamorphosis of the substances; that is, of the peptones themselves in excessive alimentation; so too it may be imperfectly secreted as a consequence of insufficient alimentation.

In the false dyspepsia these chemical disturbances never occur. There is only found in different degrees the assemblage of phenomena which are attributed to dyspepsia, such as epigastric pains, meteorism, constipation, etc. *Sée* designates them gastro-intestinal atonies, and studies them under five types: 1. Simple atony of the intestine with habitual constipation and permanent tympanites; 2. Atony from obstruction (hemorrhoids, prolapsus, rectal polypi, prostatic hypertrophy, hernia, stercoral tumors); 3. Intestinal atony with concreting mucilaginous secretion; 4. Intestino-biliary atony due to absence of bile; 5. Spasmodic atony of the stomach, known as gastralgia.

NITRITE OF AMYL IN EPILEPSY.—Dr. Maragliano (*Note di Clinica Medica*, Genoa, 1880) determined to try whether nitrite of amyl would so modify the cerebral circulation as to have a permanent effect in diminishing the fits of epilepsy. In inhaling the medicine he used a bag of caoutchouc containing some cotton wool, which was applied to the nostrils while the patient was allowed to inspire air through the mouth. The dose given was much higher than that used by other physicians. Beginning at ten drops he gradually mounted to forty, and he continued the inhalation as long as fifteen minutes without any instances in which harm was observed. Where the epileptic attacks were numerous the inhalations were repeated once every hour. Dr. Maragliano quotes the experiments of Schüller, who found that in rabbits in which an opening had been made in the skull from five to three inhalations caused a dilatation of the venous and arterial vessels of the pia mater. The smaller arteries began to pulsate, and some of them to assume serpentine curves. The brain expanded and bulged out of the trepanned hole. He no-

tices the denial of Vulpian that nitrate of amyl has any congestive action on the brain, but finds from his own observation that the temperature of the head is increased by the action of this drug. In like manner he rejects the negative observations of Loemisch, Stammeshaus, and Pick for those of Aldridge, Tibaldi, and Gradenigo, who hold that the vessels of the retina are dilated after the use of inhalations of amyl. Ladendorf found that the temperature of the mouth was raised by half a degree C. during an inhalation. That this drug impedes the oxidation of the blood is universally admitted. He found that out of thirty cases after inhalation of amyl sugar appeared in the urine in twenty-four and was totally absent in six. All traces of the sugar passed away entirely after three to six days. This appearance of sugar is supposed to be owing to the dilatation of the hepatic vessels. He admits that there are cases in which amyl is of no use in epilepsy. It promises most in those patients in whom the face becomes pale. Dr. Maragliano considers that the power this drug has in dilating the vessels of the brain (*la sua azione iperemizzante sul cervello*) is the cause of its therapeutic value in epilepsy.

SUPRA-UMBILICAL OVARIOTOMY.—Dr. Bonner, of Nimes (*Annales de Gynécologie*, January, 1881), recently removed a very large ovarian tumor containing forty-eight liters of fluid, making the incision between the sternum and the umbilicus, in consequence of the tumor, from the great abdominal distension projecting to the knees. The patient was forty-one years old. The incision was seven centimeters in length. All antiseptic precautions. Patient recovered.

PISCIDIA ERYTHRINA.—The action of this drug is thus described by Dr. Isaac Ott, in Brain:

It is narcotic. It does not affect the irritability of the motor nerves. It does not act on the peripheral ends of the sensory nerves. It reduces reflex action on the centers of Setschenow. It produces tetanus by a stimulant action on the spinal cord. It dilates

the pupil. It is a salivator. It excites sudoral secretion. It reduces the frequency of the pulse. It increases arterial tension by stimulation of the monarchical vaso-motor center; this rise of pressure is soon succeeded by a fall, due to an action on the heart and the vaso-motor center.

CONTRACTION OF THE UTERINE ORIFICES IN RELATION TO DYSMENORRHEA AND STERILITY.—Pajot contributes to the December number of the *Annales de Gynécologie* a paper with the above title. His conclusions are the following: As all obstacles to the ready flow of the menstrual blood, contraction of the canal may be one of the causes of dysmenorrhea, but not an inevitable cause.

When the physician believes this to be the cause, it is necessary to enlarge the two orifices.

Such enlargement by incisions exposes the patient to grave consequences and even to death.

Plugs, tents, dilating bodies to be retained, sometimes also cause very serious accidents.

The dilatation by graduated dilators, managed prudently and only used for a few minutes at each *séance*, have, on the contrary, so far proved absolutely inoffensive.

The external orifice only need be dilated for sterility consequent upon contraction.

In this last case the dilatatory action exercised transversely appears to produce the condition more favorable to fecundation than circular dilatation.

Notes and Queries.

UNIVERSITY OF LOUISVILLE.—The Commencement exercises of the University of Louisville, Medical and Law Departments, took place on Friday afternoon, February 25th, at 2:30 o'clock, in Macauley's Theater. The following is the list of graduates and honor men of the medical class:

LIST OF GRADUATES.

Abney, Olin L., Louisiana.	Hawkins, John T., Arkansas.
Allcock, James C., Kentucky.	Hoskins, John S., Kentucky.
Adams, Alvin M., Kentucky.	Hardin, William G., Texas.
Alexander, Percy, Kentucky.	Hooper, Robert B., Texas.
Bond, James A., Missouri.	Hensley, John H., Indiana.
Browder, George R., jr., Kentucky.	Howard, William A. Tennessee.
Branch, John S., Louisiana.	Harman, Stephen B., Alabama.
Bailey, Alexander, Kentucky.	Hawkins, James R., Kentucky.
Bramlette, William M., Tennessee.	Harris, Jasper M., Kentucky.
Caldwell, Beverly, Texas.	Hartman, Andrew J., Tennessee.
Cordier, Albert H., Kentucky.	Haggard, Clarence K., Kentucky.
Clemens, James E., Kentucky.	Jones, Edward J., Kentucky.
Cummins, Zachariah, Illinois.	Johnson, Wesley T., Mississippi.
Calvert, John H., Kentucky.	Jordan, J. Walter, Mississippi.
Caldwell, James K. P., Tennessee.	Leech, Joseph S., Kentucky.
Collins, Daniel, Kentucky.	McClatchy, John H., Mississippi.
Davis, Thomas H., Kentucky.	Milam, John W., Indiana.
Dugan, William C., Kentucky.	Miller, William S., Texas.
Davis, Maynard H., Kentucky.	Meincke, Herman W., Germany.
De Boe, William J., Kentucky.	McKim, Vincent I., Pennsylvania.
Davis, Charles P., Indiana.	Martin, Aurelius, Mississippi.
Ellis, Collin E., Missouri.	Moore, James A., Indiana.
Ellis, Mumford W., Mississippi.	Martin, James A., Tennessee.
Ellis, Walter P., Kentucky.	Meng, Walter B., Louisiana.
Everett, John D., Louisiana.	Murphy, James B., Indiana.
Edwards, Thomas A., Missouri.	McAchrn, John J., Kentucky.
Evans, James S., Mississippi.	Moore, Lynn B., Kentucky.
English, Bell, Illinois.	Martin, Jeremiah A., South Carolina.
Fort, John I., Texas.	McGowan, John W., Indiana.
Foreman, Robert L., Arkansas.	McCarley, John W., Mississippi.
Fitzpatrick, Joseph B., Alabama.	Paswater, Gilbert, Indiana.
Gray, William R., Mississippi.	Pugh, William E., Arkansas.
Gilchrist, Luther M., Kentucky.	Pate, Bloom J., Mississippi.
Gabbert, Zachariah T., Kentucky.	Purdom, James F., Kentucky.

Paynter, Charles M., Kentucky.
 Robinson, James L., Indiana.
 Reeve, Joseph L., Indiana.
 Riley, John C., Texas.
 Ruddell, Isaac N., Indiana.
 Simpson, George F., Kentucky.
 Scott, Taylor W., Kentucky.
 Stephens, William P., Texas.
 Smith, Albert D., Indiana.
 Smith, George W., Kentucky.
 Satterfield, George W., Texas.
 Shultz, Charles A., Texas.
 Stanley, Henry N., Georgia.
 Smith, Joseph H., Kentucky.
 Stinson, Henry C., Louisiana.
 Starr, William L., Indiana.

Stewart, William M., Texas.
 Snyder, Edward W., Texas.
 Sowell, Cornelius B., Texas.
 Torrance, John M., Indiana.
 Taylor, Charles B., Illinois.
 Turner, Charles B., West Virginia.
 Turner, J. Monroe, North Carolina.
 Travis, Edward A., Tennessee.
 Williams, William R., Indiana.
 Wilson, Samuel R., Indiana.
 Wilkerson, William C., Kentucky.
 Weir, Alonzo G., Indiana.
 Wilson, Cyrus L., Indiana.
 Wedding, Sylvester J., Kentucky.
 Wyatt, Benjamin F., Kentucky.
 Yeager, Newton, Indiana.

HONOR MEN.

John S. Hoskins, M.D., of Kentucky.	Robert L. Foreman, M.D., of Arkansas.
Percy Alexander, M.D., of Kentucky.	William A. Howard, M.D., of Tennessee.
Newton Yeager, M.D., of Indiana.	Joseph B. Fitzpatrick, M.D., of Alabama.
William C. Dugan, M.D., of Kentucky.	James A. Moore, M.D., of Indiana.
Albert H. Cordier, M.D., of Kentucky.	Jno. W. Milam, M.D., of Indiana.

The Yandell gold medal, named in honor of the late Dr. L. P. Yandell, sr., was awarded, for the best class-standing, to John S. Hoskins, M.D., of Kentucky; the second gold medal, for second place in class-standing, was awarded to Percy Alexander, M.D., of Kentucky; and the third to Newton Yeager, M.D., of Indiana.

THE UNDERGRADUATES' CONTEST.

J. M. Ray, of Kentucky, was awarded the first prize, a case of instruments, offered by Arthur Peter & Co.; A. W. Chapman, of Missouri, was awarded the second prize, a copy of Erichsen's Surgery, offered by John P. Morton & Co.; J. F. Meffert, of Missouri, was awarded the third prize, a case of instruments, offered by Simon N. Jones.

The Faculty Valedictory was delivered by Prof. E. R. Palmer, M.D., and will well repay perusal.

Gentlemen of the Medical Class: It is said that when one in the full vigor of health suddenly encounters imminent death the impressions of his early life, which had long ago been forgotten, return to him in a swiftly-moving panorama as vivid and fresh as if stamped but yesterday upon the tablets of memory. When I found myself a few

days ago confronted with the duty of speaking the faculty farewell to you on this occasion I encountered a somewhat similar experience. My memory reverted more than a quarter of a century to my boyhood, and recollections not wholly inappropriate to this hour crowded upon me. I was back again in a New England village, by the gate of my old ancestral home at the foot of College Hill, and a long line of medical students came filing down its narrow path on the way to their noonday meal. I thought of that old medical school, its faculty of great men and its students from every part of the country, of doctrines there taught which had even reached my young ears and made impression there; I thought of a hundred things that characterized medical teaching at that time, and then, like the swing of a pendulum, my mind came back again to today, to modern medical education, to the institution whose labors for this scholastic year we are now closing, and I saw, or fancied I saw, in the two pictures material appropriate for a valedictory.

Thirty years ago medicine in the main was taught in a strictly didactic manner. Barring dissections and an occasional class-room experiment in chemistry, instruction in most of the American colleges consisted wholly in long and elaborate dissertations from venerable professors, not a few of whom rode, with the tenacity of a John Gilpin, some pet theoretical hobby, deeming it their highest duty to parade that hobby daily before the eyes and ears of their patient and long-suffering pupils. Several of the most celebrated schools of the country were then to be found in charming northern villages, where the professors of the great metropolitan colleges could go in the spring of the year to rusticate and give a spring course.

Such was the medical school of my native town. You can easily imagine what a grand treat the yearly opening of the college was to the villagers—how the boys stared at the spruce-looking students, and how the girls put on their best frocks and most bewitching smiles as the new-comers strolled up and down the street or gathered in knots about the old white tavern. In so small a town the students soon learned to know nearly every one, and in a few weeks no party or sugaring frolic took place but what was sure to muster its quota of young Esculapians. And so the session rolled on, its dissertation, oft-times dry and prolix, freely spiced with country rollicking, until commencement-day arrived. It seems to my memory as if that day was always the perfect type of early summer. Every thing put on its holiday attire. Never was grass so green on the village square. The hillsides were white with myriads of fragrant apple-blossoms. The giant pines of the mountain-tops nodded gracefully to one another

across the narrow valley, through whose center, singing merrily as it escaped from beneath the great mill-wheel, rushed the bright river on its way to the sea. On every road that approached the village, by every conceivable conveyance, came the country people, some with throbbing hearts and eager eyes, expecting to see a son or brother enter a great profession. The stores were closed for a half-holiday, and, as if to render the scene a perfect one, troops of school-children, with handfuls of wild violets from the mountain-side and primroses and daisies from the meadows, thronged the graveled sidewalk, filling the air with songs and gleeful laughter. The exercises were held in the church at the head of the public square, and, as the faculty and class assembled, that pride of the small boy, the village brass-band, made the stained windows of the old church rattle in their leaden frames to the inspiring strains of Hail Columbia. The programme was short. A venerable United States Senator, the President of the college, conferred the degree; a few words of advice were spoken by one of the faculty, and the end was reached. A luncheon of hard cider and doughnuts followed, then a final game of ball on an adjacent meadow, then dinner, and then in the stages and on top, by private conveyance and on horseback, the newly-fledged doctors scattered into life as cheer answered cheer to the waving of handkerchiefs and the dimming of eyes too as some village maiden felt her heart go away from her behind the prancing stagers.

This is no fancy sketch, gentlemen, but represents a true scene from life—from life, however, of the past. Students no longer turn their ambitious footsteps toward that village. The wise faculty was long since dismembered. Rugged, weather-beaten children play hide-and-seek among the tall, white columns of the building on the hill, and the spacious halls that once resounded with words of learning and echoed with applause have, by the aid of the carpenter's saw and hammer, been transformed into tenements for the laboring classes. A natural inquiry from each of you might arise as to the cause of this decadence. To answer briefly would be to say that the Woodstock school fell a victim to the inevitable, the inexorable mandate of progress; and so, while some of its old friends may heave a sigh and wish for the times that were, we, as we contemplate the advances that have of late been made in the teaching of medicine in this country, can view its ruin, even in all of its unpoetic dreariness, with no sadder feeling than respect for the great minds that in its palmy days adorned it.

Let us review some of the changes that have transpired as constituting this progress. When the principle of clinical teaching, which, I believe, had its inception in Paris, first found foothold on this conti-

ment, the foreseeing minds of the medical profession discovered in that advance the doom of the rural schools. To impart knowledge to the individual, or to the few, at the bedside of the sick, was, it is true, no new idea of this age; but to the amplification of that idea to the extent of bringing large classes into actual contact with the diseased and maimed, and to the demanding of the student, as the prerequisite of graduation, that he shall have had clinical instruction in medicine and surgery—to this revolution in medical teaching modern times may justly lay claim. Thus it became essential to the success of any medical college that it should have immediate and ample access to clinical material, and such material could be found in such cities only as were metropolitan enough to have a large population of poor who would of necessity be forced to seek the hospitals and dispensaries provided not only for their benefit but for the impartation of clinical knowledge to the student.

It is not, however, my purpose to dwell today upon the immense benefits accruing to the student from this advance in medical teaching. So fascinating was it, and so brilliant the results, that it bid fair for a time to overshadow all other forms of medical instruction. The great French clinician Trousseau declared, in the introduction to his masterly work on clinical medicine, that student life should have its very beginning at the bedside of the sick.

Fortunately, however, there were strong men in the profession who were not to be blinded to the first importance of other means of instruction, and the results of their labors are to be seen today in the fine balance that exists in the curriculum of our best colleges. A healthy reaction soon came, clinical teaching assumed its proper high place, and a rapid advance began in the departments of chemistry and physiology. Some of the changes in these departments, especially the latter, I propose to cite in illustration.

It is just about twenty years since Prof. Dalton, of New York, issued the first edition of his now well-known work on physiology—a work destined at its birth to place the chaplet of well-deserved and enduring fame upon his brow, and one that has ever since given a powerful impetus to rational medicine. It may be of interest to note that this book had its inception when Dr. Dalton was a young professor in the New England school which I a moment ago described. Dunglison and Draper had both written strong books upon the subject for the American students before Dalton, but it remained for him to turn the attention of our students generally to the fascinating field of physiological experiment and analysis. No work in any tongue has ever excelled his and but few have approached it in the simplicity and

purity of its style or the conciseness and correctness of its matter. A score of elaborate treatises have since been written here and in Europe, and older works have been rewritten to meet the demands of advance. Among the former our country again stands in the front, represented by the physiology of the younger Flint, a magnificent and exhaustive library of five volumes and one which, like the earlier work of Dalton, handles the most intricate problems in the science of life with a clearness and an absence of excessive scientific phraseology that especially recommend it to the beginner. If I were asked wherein these writers have especially influenced medical teaching I would reply that to the first we owe the impulse that has been given to the study and use of the microscope, and that the latter has done much in directing attention to general laboratory work, including vivisections. Both, however, deserve credit in each direction.

Up to within a few years but a few of the students and practitioners of the country had so much as seen a microscope, and even today the plan of giving practical instruction in microscopy and chemistry to medical students generally is yet to be adopted by many of our colleges. In a recent London medical journal medical education is congratulated upon the inauguration of a movement looking to the introduction of practical laboratory work in one of the leading English medical schools. During the three years that this system has been in operation in the University of Louisville there has been accomplished such a marked improvement in its students in a knowledge of the great underlying essentials of chemistry and physiology as to demonstrate beyond question the wisdom of such an innovation. I asserted just now that when clinical instruction created a revolution in the manner of medical teaching it remained for physiology to carry onward the lines of advance by the application of its means of research to the enlarging of our knowledge of the means by which disease may be prevented or cured. I propose to cite briefly some of the benefits which the practitioner has reaped from the physiological researches of recent years.

Twenty years ago some poetic genius crystallized the then current opinion regarding one of the most prominent remedies of the dispensatory in the sentence, "Digitalis is a finger that points to the grave." Such was the dread in which that potent drug was held because of its supposed terribly-depressing influence upon the heart, that whoever administered it did so with much distrust and watchfulness. In 1867 Cyon and Ludwig conducted a series of physiological experiments upon the hearts of living animals, the result of which was the clearing up of a vast deal of the mystery that had surrounded the relations of

the nervous system to that important organ. Among the fruits of their discoveries were a series of experiments, notably those of Fothergill, with digitalis and its action upon the animal heart. It was found by these investigations that where the heart was stopped by excessive doses of the drug its state was not one of paralysis as had been supposed, but the opposite one of tetanus, and so digitalis took its place as the first and best heart tonic in the *materia medica*—a remedy no longer to be dreaded, but rather to be justly prized as of inestimable value in the treatment of all phases of cardiac exhaustion.

The great scourge of the English people is gout, an exceedingly painful malady, that either by acquisition or through heredity afflicts a large percentage of their best society. Gout is found to be due to the presence in the system of the sufferer of an excess of uric acid. Physiology having determined that uric acid is due to the imperfect oxidation of albuminous matter, has in so doing given a key to treatment, namely, a diminution in the amount of albuminous food consumed by the patient and a greater supply to him of oxygen (fresh air)—a treatment found to be vastly more efficacious than the mere administration of medicine.

Physiology has quite recently established a phase of physiological medicine called by Bartholow and others the “law of antagonism.” The action of medicinal agents upon the healthy body having been found out, drugs of known opposite action are utilized to antidote the action of one another. This advance will be found to be of especial value in cases of poisoning. Thus atropia is given as an antidote in opium poisoning, not simply because it will dilate the pupil of the eye that opium has contracted, but for the greater reason that it, contrary to opium, stimulates the heart and respiratory organs. Many valuable lives have been saved by the speedy and unstinted use of this physiological measure. Among other antagonisms of a similar nature may be mentioned that of digitalis to aconite, of strychnia to chloral, of the bromides and chloral to strychnia, of pilocarpin to atropia, and of nitrite of amyl to chloroform.

These are but mere outlines of what modern physiology is doing for practical medicine in one department alone. If we turn to germ-life and its influence in the causation of disease we at once open up a field that volumes could not exhaust. I shall dismiss the subject with a single instance of the work of physiology in this department of study.

No one cause of disease is so widespread in its field of action or so pernicious in its nature and influence as malaria. It plays upon the animal mechanism in many a morbid guise. It decimates cities and states, and renders uninhabitable many of the fairest and most fertile

spots on earth. Naturally it has always been an object of the highest interest to science to determine the nature of this subtle poison. Within the last two years this has been accomplished. Last year Klebs, of Germany, and Tommasi-Crudeli, of Italy, imbued with the belief that the cause of malarial poisoning was to be found in infusorial life, went down into the famous malarial marshes about Rome and made injections, beneath the skin of living animals, of the different kinds of earth, air, and water of those regions, carefully watching the effects in each instance, and with equal care examining the matter injected and the blood of the animals with the microscope. The results were successful beyond measure. They demonstrated the possibility of producing malarial fever by inoculation, and discovered in the matter used and in the blood and tissues of the animals thus infected the special cause of this disease—an infusoria which they named *bacillus malariae*. Further pursuit of these investigations by the original experimenters and others has discovered the habitat of these little creatures in the systems of man and animals poisoned by malaria, the time in relation to a paroxysm of fever when they hatch and pour in countless myriads from their birthplaces in the body into the blood of the sufferer, and many other valuable facts concerning their nature and their relation to this widespread form of human suffering. Thus may we say of modern physiology that it has solved one of the profoundest and most interesting problems of the ages. What it has thus far done in the domain of natural science for the health and comfort of humanity is but an earnest of what it will yet do in the near future. It stands today the unchallenged leader, the brain, the genius of modern medicine.

Thirty years ago medicine still belonged to the domain of speculative philosophy. The cell theory, destined to work such wonderful changes, had not yet crossed the ocean with a sufficiency of vigor to exert any material influence. Those great phenomena of living matter which seemed otherwise inexplicable were summarily dismissed by attributing them to vitality. It was not until the restless mind of man, fretting under this yoke of vagueness, having asked itself anew the question, "What is vitality?" sought in a practical way its answer by bringing to bear upon living organisms all of the powers that modern art has placed within its command. The result of this course has been marked, and in a few years have we seen a new bent given to the study of medicine and new channels of thought thrust upon those who would keep abreast with the changed tide.

Thirty years ago the doctor who by the powers of a logical mind could with greatest skill weave plausible theories of disease readily took rank among the foremost thinkers in medicine, and nothing so

adapted him for his peculiar work as mental training in other and kindred realms of speculative thought. He was at the same time a Baconian philosopher and an erudite man of physic. Today the leaders are the workers. Their logic is skill in conducting experiment, and their erudition a mastery of such knowledge of nature and nature's laws as progressive science has opened up in every department of life.

You who would take high rank in the future history of medical science must bear these facts in mind. Your life must be one of constant labor in the laboratories of nature. Not a department of natural science exists but what is stored with facts bearing directly upon your own chosen field of study. To these allied fields must you often turn an inquiring mind. As you advance in knowledge you will see, one after another, many of the mysteries that to others surround the laws of life made clear to your comprehension by the aggressive arm of science. It is not enough, if you would seek preëminence, that you should study the researches of others. Building upon the practical knowledge you have thus far gained, you must, as well, be workers in the field.

As you tread the paths I have hastily indicated, and day by day grow in mental breadth and stature, you must never forget that there is a fixed limit to the progress of knowledge through human reason. You must ever remember that the eternal and illimitable realm of the infinite is as a sealed book to all human power, to be known to the intellectual nature of man solely by its unknowableness. We hear much in these times of a conflict between science and religion, and many an honest regret is expressed at their apparent antagonism. Such regrets are idle. There is no conflict between true science and true religion. Their paths, though often parallel, are yet ever distinct. To the one belongs the sublime domain of finite reason; to the other the infinite realm of faith. The votaries of each are alike struggling in their own feeble yet earnest way to elevate man and make of him a better and a happier creature, and not infrequently may they join hands for the common weal. It is the great work of the church in its relation to science to lend its strong arm to aid in the annihilation of error—a mighty power, and one that ever demands of its ally the strictest demonstration of every postulate. Thus to the church science owes not a little of the separation that has so far been accomplished of the chaff from the true grain of knowledge. Often indeed its zealous heel comes down alike on both, but truth in its adamantine incasement suffers not.

“Truth crushed to earth shall rise again;
The eternal years of God are hers;
While error wounded writhes in pain
And dies amid his worshippers.”

For that student of science who, fascinated by its wondrous powers, fancies that it will in time unravel all of the mysteries of human life, I have the profoundest sorrow. For him who, dazzled by the brilliant scope of human reason, sees naught beyond it to reverence and adore, I hold a more than pity. Dreary indeed is the lot of such an one. Like some hideous monster of flesh and blood, his reason is a distorted thing, fit only to be shuddered at or receive our deep commiseration. There is that in the human heart that science can never eradicate, and that which true science every where recognizes as beyond its domain. It was manifested by the prehistoric races of man when they decked their dead with trinkets and tenderly sealed them in sacred caverns. It was the ruling spirit in Oriental and Egyptian, in Grecian and Roman paganism. It is rudely shown in the calm faith with which the savage turns his dying eyes toward the "happy hunting-grounds." The stately shafts of spotless marble that glisten in the morning sun through the graceful willows and fragrant evergreens of many a hallowed hill-side tell in no doubtful numbers of the Christian's faith and hope. You and I and all of us, whatever our bias, whatever our creed, live every hour of our lives actuated in all of our nobler deeds by the resistless sway of an innate belief in our own immortality. It is this instinctive belief in an inner spiritual nature that leads man to look beyond mere human life and strive to so purify and elevate his innermost self as to merit and receive the plaudits of his own inexplicable conscience. The world has work for both science and religion to perform—work of the highest interest to man. Let each so labor in its proper sphere as to hasten the advent of the perfect man.

You have chosen the domain of science as the scene of your future labor. Strive to be great men in that domain. Strive to rise above all petty strife and sectionalism. Strive to feel that you have no conflict with any one or any thing except the darkness that still lowers upon the confines of human knowledge. Strive unceasingly, that so the intelligence of man may be widened and posterity blessed by your labors. An idle man of genius, when once asked to exert his talents for the good of posterity, sneeringly replied, "What has posterity done for me?" Ah! gentlemen, posterity may be slow, but it rarely forgets the truly worthy. "What has posterity done for me?" If you would see a tithe of what it has done for others, go with uncovered head and shoeless feet beneath the sacred arches of Westminster, or think but a moment of the scores of immortal dead whose very names are interwoven with every fiber of the precious fabric of human knowledge.

But a few weeks ago the cloud of death passed before one of the brightest stars in the firmament of literature. The wreaths of sacred

immortelles that loving hands have tenderly placed upon her fresh grave but feebly typify the undying reverence and love with which a grateful posterity will preserve through time the rare fruits of her gifted mind. In her unostentatious life the world of letters bowed at her feet as its acknowledged queen. The shock of her sudden death has not yet lifted its weight from the heart of humanity. She lived and labored, actuated throughout her whole life by an abiding faith in the justice of posterity. The yearnings of her soul, set to the music of impassioned words, may well be cherished in the innermost shrine of every heart. Let them be to each of you an ever-ready stimulus to increasing labor in the life you are now just entering.

“O, may I join the choir invisible
 Of those immortal dead who live again
 In minds made better by their presence.
 So to live is heaven.
 To make undying music in the world,
 Breathing us beauteous order that controls
 With growing sway the growing life of man—
 So we inherit that sweet purity
 For which we struggled, groaned, and agonized
 With widening retrospect that held despair.
 That better self shall live till human time
 Shall fold its eyelids and the human sky
 Be gathered like a scroll within the tomb,
 Unread forever. This is life to come,
 Which martyred men have made more glorious
 For us who strive to follow. May I reach
 That purest heaven, and be to other souls
 That cup of strength in some great agony—
 Enkindle generous ardor, feed pure love,
 Beget the smiles that have no cruelty,
 Be the sweet presence of a good diffused,
 And in diffusion ever more intense
 So shall I join that choir invisible
 Whose music is the gladness of the world.”

My task is done. As I close these pages and gather them for the final bow, you pass forever from beneath the immediate guidance of your alma mater. A moment more, and you will mingle with the throng of fair women and brave men who have gathered here to witness and applaud your triumph. As you pass through yonder doorway into life, inspiring music will waft to your ears the faculty benediction. Step proudly as you go. It is your wedding-march they play. Step firmly, for the coy and beauteous Hygeia, whom you have this day wed, is as exacting as she is fair, and brooks no wavering or divided

love. Catch the time and keep it, and march on through life undaunted, undismayed, until the final halt is sounded, and you stand triumphant and serene before the opening portals of eternity.

THE INACCURACY OF CLINICAL THERMOMETERS. — The following card from the Winchester Observatory of Yale College explains itself:

The competition of business, coupled with the entire absence, up to this time, of any large observatory in this country paying special attention to the thermometry to which authoritative appeal could be made has so affected the manufacture of thermometers for medical purposes that it seems necessary to issue a card briefly indicating the errors commonly found to exist, and to explain why, in this case, the representations of the dealers may be at fault through the want of a proper understanding of the subtle errors to which medical thermometers are liable.

Too great a desire to economize time, good material, and skilled labor has led, in the making of thermometers, to the following faults:

1. The graduation is sometimes started from one point of the scale, near the normal, and the size of the capillary tube is guessed at. No upper point being fixed by the maker, the higher graduations may be erroneous to the extent of several degrees.

2. Too much air separating the index from the column of mercury causes the index to rise with a jerky motion; air above the index forces the index down when the thermometer is taken away from the body. In some thermometers errors from this cause amount to two degrees at high temperatures.

3. New thermometers increase their readings rapidly during the first months after manufacture, so that instruments which were right when made may change their indications as much as two degrees within a year.

It will be seen that these errors are not such as the dealer can readily detect. Even in those cases where a dealer is provided with a standard thermometer with which comparisons could be made, it is a difficult matter to determine the errors of the standard itself; and the unsupported representations of dealers and druggists, therefore, though made in perfect good faith, can not, from the nature of the case, afford the physician satisfactory evidence that any thermometer he may buy is not affected with errors, which in many instances under our observation have amounted to several degrees.

Following the example of the Royal Society's Observatory at Kew,

at which, during the past year, upward of five thousand thermometers were examined, this observatory has established a department to which any physician or other person may send thermometers by mail or express, and upon the payment of a small fee receive certificates of their exact errors. The facilities are such that there is no good reason why physicians should not buy their new thermometers furnished with the Yale certificate by the dealers. In those cases where no certificate is furnished the uncertainty may amount to two degrees. It should be remembered that thermometers which the physician has had in his possession for many months are certain to have had the requisite seasoning, and therefore an old thermometer with a recent certificate is of more value than a new one or one about whose age there is doubt.

The observatory has been called upon within three months to certify about seven hundred thermometers from various parts of our country. The results of this work have demonstrated the gross inaccuracy of the cheaper clinical thermometers as commonly sold, and seem to render expedient the publication of this card calling the attention of physicians to these errors and the great difficulty of detecting them except with the appliances of an observatory devoted to this work.

LEONARD WALDO,
Astronomer in Charge.

DIED at his residence in Lexington, Ky., January 31st, Dr. J. M. Bruce. The following notice of the untimely event, prepared by his professional neighbors and friends, we take from a Lexington paper:

Dr. Bruce has long been identified with Lexington. Here he was born in 1822. From Transylvania University, located here, and for whose generous benefactor he was named, he received the degree of Doctor of Medicine in 1845, after which he spent nearly two years in Europe profitably visiting hospitals and listening to lectures of the eminent men of that day. Returning home, he began practice, which he continued through thirty-five years, until stopped by death, suddenly and almost without warning, on Monday last. He was elected to and discharged for years the duties of the delicate and responsible position of demonstrator of anatomy in his alma mater with credit and satisfaction.

He was in early life elected city physician, to which office he was repeatedly chosen; and it is believed that it was in the faithful discharge of the duties of that office, during the recent almost unprece-

dented severe winter, that he contracted the cold and disease which closed suddenly his earthly career.

Dr. Bruce will be long and justly remembered for his courage, skill, and successful treatment of smallpox in several epidemics, of which he was certainly *at the front*; while in his long official service and private practice he labored and did more for the poor than any other practitioner in our midst has done.

KENTUCKY STATE MEDICAL SOCIETY.—The following circular is just to hand:

The twenty-sixth annual meeting of the Kentucky State Medical Society will be held in Covington, beginning on Tuesday the 5th day of April. Your attention is called to the time of meeting *now* in order to favor the preparation of papers or reports upon such subjects as you may select. Voluntary papers will receive equal attention with reports of committees, and abundant time will be devoted to their discussion.

The programme indicating each day's proceedings will be issued on March 15th. Please notify the undersigned by that date of such papers, with title, as you may elect to contribute. The meeting promises to be one of unusual interest and importance to Kentucky physicians, and your attendance upon and participation in its proceedings are earnestly and respectfully invited.

I am, very respectfully, etc.,

L. S. MCMURTRY, *Secretary*.

THE AMERICAN PRACTITIONER.

APRIL, 1881.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

A CASE OF EXTRA-UTERINE PREGNANCY—OPERATION.

BY WM. O. ROBERTS, M.D.,

Demonstrator of Anatomy and Surgery in the University of Louisville, etc.

The history of the subject of the present report, as obtained from Dr. Joseph Hale, of Owensboro, Ky., in whose practice the case occurred, is as follows:

Mrs. T., living in Owensboro, aged twenty-five years, small in stature, but of vigorous constitution, was the mother of one child three years old. She ceased to menstruate October 1, 1879. A month afterward she began to suffer from pains in the epigastric region, attended by fever, nausea, and vomiting. These attacks, which would last for several days and recur at intervals of four weeks, were accompanied for the first three months by a slight sanguineous discharge from the vagina. About the close of the third month extra-uterine pregnancy was diagnosticated. The condition of the patient, save a gradual en-

largement of the abdomen, continued much the same until the 4th of April. Severe spasmodic pains in the lumbar region, which recurred very rapidly, now set in and persisted for sixteen hours in spite of large doses of opium. Soon after this, fever, accompanied by pain and tenderness over the entire pelvic region, and by nausea and vomiting, set in, and continued steadily for ten days, when they began gradually to subside. The abdomen now became enormously tympanitic. There was frequent inclination to evacuate the bowels, a very sanguinolent fluid passing with each effort. The tympanitis continued to increase until the abdominal walls seemed ready to burst, and produced extreme difficulty of respiration. The mammæ, which had been enlarged and otherwise presented evidences of pregnancy, now began to shrink, and presently lost all marks indicative of that condition. The sounds of the fetal heart and of the placental bruit, which had been very distinct, could no longer be heard.

The death of the fetus having now certainly occurred, an operation was advised, but not assented to. The patient continued in this distressing condition until April 25th—about ten days—when the cyst opened into the intestinal canal, and there was discharged per anum a dark, putrid fluid, with large quantities of offensive gas. The abdomen now rapidly reduced in size, the fever subsided, and the woman became more comfortable. Consent was finally obtained for an operation, and Prof. D. W. Yandell was telegraphed to go to Owensboro, Ky., but being unable to leave home he was good enough to request me to go in his stead. I reached the patient by 10 P.M. of the 26th, and saw her with Drs. Hale, Tyler, and Luckett. Her condition was then as follows: Extreme emaciation; face very pale; countenance pinched and anxious; axillary temperature 103° ; pulse 120; intense nausea, with inability to retain any thing whatever in the stomach; abdomen considerably distended; great tenderness on pressure; palpation revealed a hard, irregularly-shaped tumor in the hypogastrium. There were frequent and rather copious discharges of a dark color and exceedingly offensive odor from the bowels. Patient was excessively restless, sleeping

but little and easily aroused. At 12 M. the next day, 27th, the temperature had fallen to 101° and pulse 114. In other respects her condition was unchanged.

The physicians present concurring, I proceeded at once to attempt the removal of the dead fetus by an operation. The patient being brought under ether, the abdomen was opened by an incision which, beginning two inches below the umbilicus, followed the median line downward five inches. The bleeding vessels were secured by artery forceps, and the peritoneum raised and opened. No adhesions were found connecting it with the anterior wall of the sac. Spencer Wells's trocar was then introduced into the sac, and several ounces of fluid similar to that which had been passing from the bowels, together with a considerable amount of gas, was drawn off. An incision was then made in the sac, the walls of which were found to be about three fourths of an inch in thickness, enveloping a fetus, which we judged to be between five and six months old, in an advanced stage of decomposition. This I removed by means of Thomas's ovarian forceps. Some traction was made on the cord in the removal of the fetus, and as the placenta did not seem "to give" it was allowed to remain to slough out. Before opening the sac I lifted it slightly out of the abdomen and held it by means of tenacula during the removal of the fetus, in order to prevent its contents escaping into the peritoneum. The fetus being extracted, the interior of the sac was sponged out with carbolic solution (1 to 40). The upper part of the wound was closed by deep sutures passing through the walls of the sac, a good-sized rubber drainage-tube was introduced, and provision made to catch any discharges which might escape. The operation throughout was done with full antiseptic precautions. The subsequent course of the case is thus minutely described by Dr. Hale:

"Three hours after the operation temperature 99° , pulse 108. 29th—morning temp. 100.5° , p. 108, nausea and vomiting, milk and lime-water as nourishment, hypodermic morphia; evening temp. 100° , p. 108. 30th—M. t. 100° , p. 108; E. t. 100° , p. 102,

morph. hypoderm., milk and lime-water. May 1st—t. and p. unchanged, no nausea or vomiting, takes milk well, continue morphia. May 2d—t. and p. unchanged, no nausea, bowels moved several times, passing an offensive matter; morph. and milk and lime-water continued, with five grains of ingluvin every six hours; maltine and pepsin with pancreatin given, but rejected by stomach. May 3d—M. t. 101° , p. 114, no nausea, cyst discharging less, drainage-tube removed; E. t. 103° , p. 120, no nausea, cyst discharging less, and discharge less offensive. May 4th—M. t. 102° , p. 116, cyst discharging per anum; E. t. 103° , p. 114, the cord and a portion of placenta removed through incision, discharge very offensive. May 5th—M. t. 102° , p. 114, some nausea with oppression of stomach, pulse more feeble, more pallor of face, continue morphia and ingluvin; ext. beef, wine, and iron ordered in teaspoonful doses; several pieces of placenta removed; E. t. 102.5° , p. 120, nausea and vomiting; omitted beef, wine, and iron; continue morphia, milk, and lime-water. May 6th—M. t. 102.5° , p. 120, nausea and vomiting, great pallor, pulse small and quick, wound looks well, discharging but little, quinia sulph. gr. ij, morphia sulph. gr. $\frac{1}{4}$, hypoderm.; E. t. 103.5° , p. 120, stronger and more volume, quinia sulph. gr. ij, morphia gr. $\frac{1}{4}$, hypoderm., cyst discharging less, bowels moved, discharging fecal matter. May 7th—M. t. 103° , p. 114, nausea and vomiting, with frequent oppression of breathing, quinia sulph. gr. ij, morphia gr. $\frac{1}{3}$, hypoderm.; E. t. 105° , p. 130, nausea and vomiting persist, repeated quinia and morphia, cyst discharging very little, countenance anxious. May 8th—M. t. 102.5° , p. 114, nausea less, quinia and morphia as before, bowels discharged fecal matter, cyst discharges less; E. t. 104° , p. 120, quinia and morphia as before, milk and lime-water. May 9th—M. t. 103° , p. 120, nausea and vomiting, more prostration, cyst discharging very little, quinia and morphia continued, inunction of entire body with cod-liver oil; E. t. 105° , p. 124, quinia and morphia. May 10th—M. t. 103° , p. 114, nausea and vomiting, quinia and morphia, cod-liver oil discontinued, being offensive to patient; discharge from cyst much less, and less offensive; E. t. 104.5° , p. 124, quinia and

morphia, discharge per anum ceased. 11th—M. t. 103° , p. 120, cyst discharging more, some fecal matter passing from it, discontinued quinia, but gave morphia; E. t. 105.5° , p. 135, very restless, nausea and vomiting. May 12th—M. t. 102° , p. 120, less nausea and vomiting, more quiet, cyst discharging freely a dark fluid, evidently from intestinal canal; E. t. 102° , p. 124, quinia and morphia resumed, cyst discharging fecal matter freely through wound, no discharge per anum for two days, injected warm water into rectum, passed freely out of wound. May 13th—M. t. 102° , p. 124, nausea and vomiting, cyst discharging fecal matter through wound, no discharge per anum, quinia discontinued; E. t. 103° , p. 124, nausea and vomiting, fecal matter passing freely from wound, takes more milk. May 14th—M. t. 101.5° , p. 120, nausea and vomiting less, takes more milk than for a week, examined rectum with finger and found it loaded with solid fecal matter, which I removed with my finger; the cyst explored through incision was also found charged with fecal matter; this was removed in same way, and the cyst thoroughly washed out; a careful exploration of the cyst showed that it was firmly adherent to all the parts which lie in contact with it; the opening between the cyst and intestine is large, and about the junction of the rectum and the colon; water injected into rectum passes freely through incision, and *vice versa*; E. t. 100° , p. 120, no nausea, takes milk well. May 15th—M. t. 101.5° , p. 130, feeble and quick, no nausea, resumed quinia and morphia injections; E. t. 101.5° , p. 120, nausea less, takes more milk, cyst still discharging fecal matter, no discharge per anum. May 16th—M. t. 99.5° , p. 115, rested better last night than for a week, takes milk and white of egg in water, cyst still discharging fecal matter through the abdominal incision. May 17th—M. t. 100.5° , p. 120, no vomiting, slight nausea, substituted elix. opii and tinct. nux vomica for quinia and morphia; E. t. 103° , p. 140, very quick and feeble, occasional nausea, fecal matter still passing through the incision. May 18th—M. t. 99.5° , p. 120, takes beef tea and milk; E. t. 103° , p. 140, quick and feeble, less nausea and vomiting. May 19th—M. t. 102° , p. 130, occasional nausea and vom-

iting; E. t. 104°, p. 140, very quick and feeble, vomiting frequent, throwing up a dark, offensive fluid. May 20th at 8 A.M. the patient died quietly.

“To make this report as brief as possible, I omitted to note the management of the cyst, and here add that the cyst was washed out once a day with a solution of pot. permanganate, one to two grains to the ounce, for the first three days; after that time it was done two to three times each day; and after the contents of the cyst were removed a one-to-forty solution of carbolic acid was used. The cyst entirely ceased all discharge except the fecal matter mentioned for ten days before death.”

Had the operation in this case been performed when first proposed—that is, immediately on the death of the fetus—there is good reason to believe that the mother’s life would have been saved; for the two great dangers—viz. peritonitis and septicemia, which are to be feared as the results of the operation—might have been avoided by antiseptic precautions. Statistics warrant this conclusion.

LOUISVILLE, KY.

PLACENTAL OR UTERINE SOUFFLE?

BY THEOPHILUS PARVIN, M.D.

In the year 1821 Lejumeau de Kergaradec, in his original memoir upon auscultation of the abdomen of the pregnant woman, stated one could hear the sounds of the fetal heart and also sounds depending upon the utero-placental circulation—*battements simples avec souffle*, he called the latter, and by them the position of the placenta could be determined. Lau, in a memoir published in Berlin in 1823, denied any relation between this *souffle* and the placenta. Thus commenced a disagreement in the professional mind which not even the researches of Dubois

have ended. The disagreement exists to the present day; for although the great majority now designate this *souffle* uterine, yet by some it is still termed placental.

About two years ago a writer in the London *Practitioner* declared that he could predict the sex of the child by learning from auscultation the position of the placenta. Our own great countryman, Dr. T. G. Thomas, whose admirable work upon *Diseases of Women* has not received, can not receive, too much praise, in that work, page 712 of the last edition, makes the placental *bruit* one of the means by which pregnancy may be distinguished from an ovarian cyst. Pajot, in a very appreciative review (*Annales de Gynécologie*, March, 1880) of the French translation of Dr. Thomas's work, expresses astonishment at this, wondering how it could occur after the French works of the last thirty years.

Quite recently a distinguished medical teacher of Louisville, one who has himself made valuable contributions to the subject of obstetric auscultation, uttered the following words: "The soft, blowing murmur, synchronous with the maternal pulse, is heard most distinctly over the seat of the placental attachment. . . . That it coincides with the placental attachment has been verified in many cases when the afterbirth required removal. The probabilities are that the sound is produced by the rush of blood from the enlarged arterial vessels in the uterine walls into the utero-placental sinuses."

In opposition to the views of these gentlemen, in so far as any claims to knowing the position of the placenta from this souffle are concerned, the words of Schroeder might be quoted: "No safe conclusion as to the seat of the placenta can be drawn from it."

Believing that the term "placental" in connection with the sound referred to is not only a wrong, but also a misleading designation, I propose quoting in criticism from six recent obstetric works, or at least recent editions—two English, two French, and two German.

In Leishman, third American edition, the term "uterine souffle" is used, and the statement made that this souffle has "no fixed relation to the site of the placenta, and it certainly gives no reliable evidence, as might have perhaps been expected, as to where the placenta is situated in the uterus."

In Playfair too we find the same designation given. On page 138 of the third American edition of this work we read, in reference to the sound in question, "For long it was supposed to be formed in the vessels of the placenta, and hence the name *placental souffle*, by which it is often talked of; or if not in the placenta, in the uterine vessels in its immediate neighborhood. The non-placental origin of the sound is sufficiently demonstrated by the fact that it may be heard for a considerable time after the expulsion of the placenta."

Depaul, in his *Leçons de Clinique Obstétricale*, enters very fully into the history and applications of obstetric auscultation. As is well known to the profession, he has devoted much time to its study and has materially increased its knowledge. In referring to the *souffle utérin*, he states his experience has proved to him that its maximum of intensity is found at the sides of the uterus, and that it has its origin in the uterine vessels there placed; as a sign of pregnancy it indicates nothing certain; it undergoes no change from the death of the fetus; and likewise as to changes in the placenta or as to place of implantation it gives no positive information. He remarks, "I add, it has rarely occurred to me to find the placenta inserted at the place where I have perceived the maximum intensity of the uterine souffle, and when this has been the case it has seemed to me a simple chance result."

In the second fasciculus, issued last year, of the *Traité de l'Art des Accouchements*, by Tarnier and Chantreuil, the authors, criticizing the placental theory of the souffle, remark that a peremptory demonstration of the error of those advocating it is given by the fact that the sound persists after the expulsion of the placenta. They refer to Bailly's recent investigations upon this point, who shows that it thus persists nine times in ten, and that the mean duration of this *post-partum* souffle is two to three

days; in one case he saw it continued to the sixth day. The observations of Bailly have been confirmed by those of Dr. Maggia, of Padua. It need not be added that Tarnier and Chantreuil, sustaining the uterine theory, give the souffle this designation.

Naegele and Grenser (I quote from the eighth German edition of their well-known work): "The *uterine bruit*, formerly wrongly called the *placental bruit*, is isochronous with the radial pulse, and has a great analogy with the souffle of a varicose aneurism. . . . Generally it is heard at one or both inguinal regions, whence it extends, almost always upon the side, either above or to the front, in an illy-defined, more or less extensive space. Sometimes it is heard at points far separated from each other, and sometimes it extends over the whole uterus."

In that superior work, Spiegleberg's *Lehrbuch der Geburtshülfe*, the second edition of which is in publication, we read under the heading of *Das Uterinräusch*, "The uterine souffle, formerly called the placental souffle, is a blowing or humming sound, now and then whistling, isochronous with the mother's pulse, resembling that of a varicose aneurism. As it has its origin in the arteries which are at the side of the lower uterine section, entering here, and also in their branches in the parenchyma, perhaps also at the emptying of arteries into large veins, one hears it over a more or less large space at the sides of the uterus, and especially more frequently in that turned more in front; now and then also at the fundus and the anterior portion of the body of the uterus." After discussing the cause of this sound, and stating that possibly it may have a certain relation to the placenta, especially when it is not at the side of the uterus, but is heard in the upper part, he adds, "But in the placenta itself it does not originate." He thus concludes his discussion of the subject: "With the evacuation of the uterus by parturition the souffle does not at once cease, but may be observed with gradually decreasing intensity for several days, at the most six. Sometimes it becomes for moments very remarkable with relaxation of the uterine walls. This fact, which has been repeatedly observed by me, finds its explanation in the previously-mentioned seat and mode

of origin of the souffle, for the metamorphosis of the uterine vessels is not instantaneous."

It is not necessary to prolong this criticism by adducing other authorities.* Accepting the common testimony of those who have been quoted, there can be no question as to the incorrectness of designating the souffle in question placental. It should always and every where be called uterine. Moreover, that this sound guides us to the uterine position of the placenta, is a statement which, in the light of the testimony here adduced, must be received, if received at all, with grains of salt both many and large.

INDIANAPOLIS, IND.

A CASE OF EMPYEMA—OPERATION—RECOVERY.†

BY Z. CARNES, M.D.

In reporting the following case which occurred in my practice, it may not be amiss to remark that while authorities on the subject offer certain plans of treatment in empyema, few of us who have had occasion to manage such cases but have experienced disappointment in the result. Prof. Flint advocates a free opening and free drainage, secured, if necessary, by a counter-opening, in order that pus may escape as fast as formed. Bryant advises free opening and free drainage, regardless of the entrance of air. Flint advocates washing out the cavity in case there be fetid pus. I myself think it better practice to wash out the cavity with simple warm water or water to which is added a little

*Kiwisch, in 1849, and Glenard, 1876, attributed the *bruit* to the epigastric artery. The latter soon abandoned this theory, substituting the *puerperal* artery—the anastomotic branch between the uterine and ovarian, which in pregnancy becomes as large as the humeral—for the epigastric. Essentially then even he adopted the uterine theory of the origin of the sound in question.

†Read before the Johnson County (Ind.) Medical Society at its meeting December, 1880.

chloride of sodium—one or two drams to the pint—whether or not the pus be fetid. And where the opening closes at too early a period I believe it well to reopen the wound and thoroughly cleanse the cavity by injections, throwing the solution in until it returns clear. As regards the danger of admitting air into the sac, there is much difference of opinion. For my own part, I believe it to be impossible to thoroughly drain the cavity without the admission of air. With these preliminary remarks I proceed to report the case.

March 5, 1880, I was called to Rosa D., aged thirteen years, previously healthy. I found her laboring under pleuro pneumonia affecting left side. Respiration 35, pulse 114, temperature 103.5° . I had cloths wrung out of hot water frequently applied over the left chest, and gave veratrum viride, aconite, and opiates, with a purgative at bedtime, and enjoined that patient should have nourishment. During the next four days condition remained materially the same. March 9th—r. 36, p. 120, t. 104° , slight delirium, expectoration of stringy, adhesive, rust-colored mucus; dullness increased over left lung; patient growing weaker; directed veratrum viride to be given only when indicated by the pulse, and gave milk punch, eggs, and whisky, along with quinine every three or four hours. March 11th—r. 43, p. 125, t. 103.5° , increased dullness on percussion, expectoration of a prune-juice color, applied a blister over left side. March 12th—r. 35, t. 102° , p. 125, patient resting better and expectorating more freely; a large poultice was applied over the seat of the disease on the removal of the blister; stimulants, etc. continued. During March 13th, 14th, and 15th patient continued to improve in every respect; the dullness diminished, while the subcrepitant râle, broncho-vesicular respiration returned; an oil-silk jacket covering the entire chest was substituted for poultice. The next day (16th) the patient was so well that after adding bark and iron to the quinine previously given I discontinued my visits.

On April 6th I was again called. At this time her respiration was 29, pulse 100, temperature 101° ; slight dullness on percussion over lower portion of left lung; dry, hacking cough. I

applied tinct. iodine over the seat of dullness; directed expectorants and tonics and gentle airing in a buggy morning and evening. April 10th—appetite better, sleeps well, squills and digitalis added to the treatment. April 15th—still improving; able to be up about the room most of the day; treatment continued.

May 3d I was again called. The patient's respiration was now 36, pulse 130, temperature 102° , hacking cough, appetite poor. Inspection showed perfect immobility of chest-wall, with general enlargement of the affected side. The intercostal spaces were even with the ribs, and the cardiac impulse was seen most distinct near the right nipple. Mensuration showed enlargement of the affected over the healthy side in its circumference of one inch and a quarter. Universal flatness on percussion over the affected side, extending even beyond the natural limits of the lung; entire absence of respiratory and vocal sounds except over the apex of the compressed lung, where could be heard a feeble, bronchial respiration; puerile breathing over the healthy lung. The diagnosis was easy. I at once advised evacuation of the fluid by puncturing the chest-walls, and requested a consultation. My friend Dr. Payne was called. There being an unwillingness on the part of the family to any surgical operation, Dr. P. and I agreed to test the power of sorbefacients, whereupon the patient was put upon the use of potas. iodid. and potas. acetat. with flying blisters over the chest. This treatment was continued for ten days, when there being no evidence of improvement it was determined to do paracentesis. The introduction of an exploring needle confirmed the diagnosis, when an opening was made in the back part of the chest pretty low down, through which flowed four quarts of healthy pus, occasionally some floculi of lymph. But little disturbance ensued. The opening was closed by adhesive plaster and the patient given a toddy. She passed a comparatively comfortable night.

Next day, May 15th, r. 30, p. 107, t. 99° , appetite decidedly better. For the five succeeding days the condition of things remained about the same. On the 22d, r. 36, p. 148, t. 101° ; and on the 23d and 24th the temperature rose to 103° , the counte-

nance became anxious, the eyes heavy, complexion sallow, and percussion sound again became dull over the entire left side. A second opening was now made at the previous point, and half a gallon of pus removed, darker in color than the first, but without fetor. The next day respiration and pulse unchanged; temperature 101.5° ; patient complains of much pain and soreness over the chest. May 26th—r. 33, p. 160 and intermittent, t. 104° , dry cough, appetite poor, slept badly; food, stimulants, and tonics continued. No effort was made to prevent the entrance of air into the chest, which occurred freely. On the 27th and 28th r. 30, p. 140, t. 103° , appetite somewhat better, rested better. On 29th and 30th rested well, appetite improving, respiratory murmur returning in summit of lung. June 1st—r. 36, p. 144, t. 103.5° , chest enlarged, heart-sounds more to right, chest evidently refilling; ordered Scott's emulsion of cod-liver oil and a buggy-ride morning and evening when the weather would permit. June 2d and 5th—r. 42, p. 150, t. 101.5° , pus escaping from the opening to the amount of several ounces; size of chest decreased. Some discharge from the opening continued up to June 15th, when the opening closed. But as there was evidently considerable fluid remaining, the operation was repeated, and more than a quart of dark-colored pus removed, after which the cavity was thoroughly washed out with a solution of chloride of sodium.

From this time the improvement was marked in every respect, particularly appetite and general appearance. On June 21st, though still improving, it was evident there was still considerable accumulation. Paracentesis was repeated, and about a quart of sero-purulent fluid was removed and the pleural cavity again thoroughly cleansed as before. July 1st—patient rapidly improving; enlargement of affected side diminishing; the intercostal spaces are regaining their normal condition, the movements of the chest-walls and vocal fremitus are returning, and percussion sound gradually growing normal. The heart and adjacent abdominal viscera are returning to their places; appetite good, patient cheerful, rapidly increasing in flesh. July

14th—the discharge has ceased and the opening healed, the patient fast gaining flesh.

When attacked with pleuro-pneumonia the 4th of March the girl's weight was sixty-five pounds. On May 14th—date of first operation—it was fifty pounds. She is now well; has neither pain nor cough, nor any other symptom of disease; and today—December 14, 1880—her weight is ninety-eight pounds.

GREENWOOD, IND.

LIGATION OF THE FEMORAL ARTERY.

BY G. W. H. KEMPER, M.D.

On the 15th of April, 1880, Master H. M., aged about twelve years, while carving his name on the handle of a spade, allowed the blade—a very sharp and pointed one—to slip off and penetrate the center of the left thigh over the site of the femoral artery. The stab was followed by a profuse hemorrhage, which was finally controlled by a non-professional friend. On the following evening a second hemorrhage occurred, and was again checked. About one week later a rather hard and circumscribed swelling developed around the wound, and Dr. Winton was called to see the patient. Slight hemorrhages occurred almost daily. I saw the patient with Dr. Winton on the 8th of May. The thigh was greatly swollen, measuring fifteen inches in circumference. Over the swelling a distinct bruit was heard. Diagnosis, diffused false aneurism.

On the afternoon of May 10th, assisted by several medical gentlemen, after applying Esmarch's bandage I made an incision about five inches in length on the inner side of the sartorius muscle. Upon dividing the superficial fascia I came upon a large, irregular-shaped blood clot, which had dissected a way between the muscles of the thigh. This was turned out and the

cavity cleaned. After pushing the sartorius to one side the femoral artery was exposed to view. A longitudinal incised wound half an inch in length had been made in the artery. A stout silken ligature was placed on each side of the wound, which arrested further hemorrhage. The external wound was closed with stitches and adhesive strips, and artificial warmth supplied to the thigh, leg, and foot. The ligatures came away on the seventeenth day, and he made a good recovery. The clot had formed a fibrinous mass, and inside of this was a smooth cavity communicating with the artery and giving rise to the bruit.

MUNCIE, IND.

ON THE RISKS OF SURGICAL OPERATIONS.*

BY J. HALE, M.D.

There is perhaps no subject in the whole domain of surgery which requires more knowledge or greater judgment on the part of the practitioner of surgery than that which forms the caption of this paper. Yet few treatises on surgery devote much space to the subject, and fewer still of our many teachers of surgery give much time to it in their lectures. We propose in the following paper to give simply a brief summary of our knowledge of the subject, and add some facts not found in the treatises on the practice of surgery.

A knowledge of surgical anatomy and the art of operating are but a small part of the requisites of the successful surgeon. To learn how to operate, is an easy matter; but it is often most difficult to know when and under what circumstances an operation should be done. The condition of patients varies so much that it is often difficult for even the most experienced surgeon to predict the result of an operation.

* Read before the Tri-States Society.

The average risk to life from any surgical operation can in some degree be approximated by reference to the statistics of great hospitals; and if an operation be often performed, variations in its risks in the two sexes and at different ages may in just that far be determined. But it is not within the capacity of statistics to supply the means of determining the variations of risks, dependent on the great variety of individual conditions found among the sick. Statistics can tell neither the several nor united differences of constitution in sound or unsound health, of diseases of internal organs, of temperament, of habits of life, etc. Yet the safety of an operation must largely depend on one or more of these several conditions. And not only its mere safety, but its utility as well; for there are cases which occasionally arise where operations are inadvisable, not because of the risk to life, but because the subject has some individual peculiarity of constitution or condition which would cause him to suffer more pain or inconvenience from an operation than the result of the operation would justify. If the surgeon is to actually do more good than harm by his work he must indubitably possess both tact in detecting and skill in correcting those defects of health which render operations either unsafe or unsatisfactory.

Unfortunately there is no accepted standard of health which can be referred to as being clearly the best for bearing operations. Such a standard is not even found among those who often appear very models of health; for instance, those who have sufficient health for all ordinary labor are by no means those who always bear operations best, as seen in the fact that amputations for injuries of limbs performed on such persons are about twelve per cent more fatal than similar operations for disease where the general health is always more or less poor. Nor are the seeming disadvantages of full health, illustrated by this fact, to be seen in the greater mortality only of similar operations, but in the manner and rate of healing in such as recover. It shall sometimes happen to the surgeon to do two amputations the same day—the one on a subject in robust health, for an

injured leg; the other on an individual greatly debilitated by a chronic joint-disease. Yet he shall not infrequently find that the healing of the stump in the strong man requires a much longer time and is interrupted by many more untoward events than that of the weak one.

I do not wish, however, to be understood as arguing from these facts that good, strong health is in any sense an impediment to recovery from injuries; for such is not the fact. The real difference will be found, I fancy, in the condition of the seemingly healthy at the time of the injury, superadded to the shock of the injury, no less than that of the operation. The latter falls with peculiar and crushing force on the previously well man, and necessarily far exceeds that which comes to him who, through all the dread of an operation, anticipates being relieved of protracted suffering and long-standing disease. Further, the previously well man is necessarily subjected to a great and very sudden change of the very habits on which his health depended; among them the exercise whereby he got rid of refuse matter and tissue waste.

Among the many points of difference which exist between individuals, difference in age possesses marked importance in determining capacity to withstand surgical operations. I incline to believe that every year after childhood there is a proportional increase in the graver tendencies in operations. The reports of hospitals lead me to this opinion. There are, however, many other factors besides mere age to be considered in this connection. Young children, for instance, bear pain badly, and ill support shock; but if these risks be safely passed there remain fewer dangers in their paths than in older persons. Children are especially exempt from pyemia following operations. The most important part, however, which age plays in operations is that which is observed in the very old. Among this class of patients almost every danger incident to surgical procedures culminates. The longer life is extended after middle age the more likely is the individual to become the subject of some organic disease, the more sure is he to have degeneration of certain organs, while

his feeble and imperfectly performed circulation disposes him to congestions of various parts and organs. Yet the fact should not be lost sight of that age can not be reckoned by years alone. Even among the old who are without visible disease the observant eye can easily distinguish by their appearance subjects who differ very greatly in their ability to bear up under injuries. Such as are fat, with pale skin and soft tissues, who are incapable of enduring fatigue, and look older than they are, make very bad subjects for the surgeon. On the other hand, those that are fat, florid, and plethoric, with firm skin and good muscular power, and able to work like younger men, are not always good subjects. Those old people who are thin and tough, clear-voiced, bright-eyed, and active, with good stomachs and strong will-power, furnish the best subjects for operation among the aged, bearing all but the largest operations very well. There are some old people, however, who at first glance look very much like those just described, who are feeble and soft-skinned, with small, feeble pulses, bad appetites, and weak digestive powers, that make the very worst class of subjects for operations, being liable to die quickly of shock or more slowly of exhaustion.

In those constitutional derangements which are unattended by other organic disease than that demanding operation patients generally bear operations well, as the relief from pain and irritation in a great degree counterbalances shock and other depressing influences. Such subjects seem not particularly liable to pyemia, erysipelas, etc. Though in them wounds heal, as a rule, slowly, certain constitutional diseases, as rheumatism, gout, and cancer, do not seem in themselves to militate against the success of operations. Rheumatism and syphilis, scrofula and tuberculosis would seem to exert no further influence than that which arises from the extent and duration of the local lesions and general impairment of the organic functions.

The most powerful for evil of all constitutional conditions is that of chronic alcoholism. No individual is so little calculated to withstand surgical injury or operation as the habitual drunkard. Whenever such an one passes through the perils of a grave

operation it is, beyond all peradventure, the exception to an almost universal rule. In a subject who drinks spirits in any form the degree of intemperance determines the risks of operations. In regard to the habit of steady drinking in what is called moderation, it is even worse in its influence on surgical operations than occasional drunkenness. I incline to withhold the knife in the person of the habitual drunkard, save in such extreme emergencies as an obstructed windpipe or strangulated hernia or some not less imminent condition.

Nervous subjects, properly so called, are always very apprehensive of the result of operations, often contending that they can not bear shock. I have often been surprised to witness how little influence this excessive vivacity of their cerebro-spinal nervous system exerts on their organic functions. They sometimes seem to suffer great agony of mind, and no doubt do; yet the pulse is even and regular, and they offer no sign of disturbance of any of their functions. They sometimes have rigors, trembling, and spasmodic movement of the limbs, but mischief rarely follows. And the very mobility of mind which makes such patients so apprehensive before operation makes them especially hopeful when it is done. Of all subjects who can in any sense be called invalids—if these can be—I know of none who bear operations better than they do.

The surgeon is occasionally called upon to operate during the course of some acute diseases. Here he should carefully acquaint himself with all the facts in the case, that he may accurately estimate the dangers of his undertaking. The influence of acute diseases on surgical operations is not equally marked. Patients, for instance, with malarial fever as a rule bear operations as well as others of a like class; but in the course of recovery they often have one or more chills which closely resemble those that precede pyemia. Another fact of some interest in this connection is, that patients who have never had a malarial chill are exceedingly liable to suffer an attack after surgical operations, especially if there has been much shock or loss of blood.

In erysipelas, or that spreading inflammation of the cellular tissue which is so closely allied to erysipelas, the risks of operations are necessarily greatly increased. In acute pyemia I may state it as a rule that no operation whatever should ever be undertaken. In chronic pyemia, on the other hand, if the cause demanding an operation be such as to augment the suffering and exhaustion of the patient an operation should always be undertaken in spite of the increased risks which attend it. In croup and diphtheria tracheotomy is often demanded, and a herniotomy may be called for in the midst of an acute peritonitis. These, and others like them, are simply cases of necessity, where, though the risk to life is great, the mere healing of the wound may progress as favorably as in other cases.

The female subject possesses some conditions peculiar to her sex that should be duly considered in estimating the probable risks of operations. During pregnancy and in the puerperal state all risks are increased in some degree, and, as a rule, no operation which can be delayed should be made upon such subjects. The menstrual period may also modify the risks, and all operations that are not urgent should be deferred until the menstrual interim. Notwithstanding these additional risks of the female, she, as a rule, endures the great operations better than does the male. This fact is ascribed to the temperament and habits of the sex, most women being, as a rule, of the nervous temperament, which better enables its subjects to endure injuries of all kinds. Finally, females almost without exception are wholly free from that greatest source of all risks, chronic drunkenness.

OWENSBORO, KY.

FOREIGN CORRESPONDENCE.

My Dear Yandell:

LONDON, March 15, 1881.

March has come, and we are still in the midst of wintry weather. Piercing northeast winds, snow, and cold rain combine to make the death-rate very heavy, while the amount of coughing, sneezing, and such like in churches and theaters is really quite astonishing. Even those happy or unhappy people who have fled to the south of Europe for the colder season have met with much disappointment. For nearly a month past the weather all along the Riviera from Nice to Genoa has been most unusual. At Mentone, which is justly considered to be the warmest of all the winter stations, snow has fallen several times; while from the snow-capped mountains above the town a piercing wind has swept down, causing great suffering to invalids and raising clouds of dust which have been a torment to the most healthy. This last feature is indeed one of the greatest drawbacks to these winter resorts, and renders walking—at least along the roads—a far from agreeable exercise. Lastly, the wretched arrangements for heating the rooms are a great source of annoyance, so that the slightest fall of temperature is greatly dreaded, and the good coal fires even of smoky London are looked back on with fond regret.

As I mentioned at the conclusion of my last letter, I have had a short run to southern climes, but the business on which I went and the very short time at my disposal left me scarcely any leisure for visiting hospitals or seeing methods of practice. I paid, however, while in Paris, a couple of visits to the great hospital of La Ribosière, where I saw many remarkable surgical cases. Monsieur Labbé, the surgeon with whom on both occasions I made the round of the wards, was most kind, and pointed out all the details likely to interest me. He himself has taken up the Listerian antiseptic system of operating and dressing with great enthusiasm, and says that the results are eminently satisfactory. French surgeons have never been lacking in bold-

ness, as regards operative treatment, but Monsieur Labbé declared that the Listerian system enabled him to enter upon the more critical operations with lively confidence. He had in his wards a most striking series of cases of epithelioma of the face, on which he had evidently bestowed great care. He showed us one case of which he was especially proud. He had removed from him, for an epitheliomatous growth, the eye, with the orbital surface and upper part of the superior maxilla, together with the soft parts and integuments over it. To cover the wound he had brought down a flap cut from the temporal region, and the result was most satisfactory, the scar being very slight and the deformity trifling.

One great feature in Monsieur Labbé's practice of which we did not understand quite so well the rationale was the external application of collodion in all external inflammation. He assured us the results he obtained from this were quite marvelous. We saw him paint collodion thickly all over the surface of the arm in a case of cellulitis in that member, and he said he relied on the immediate relief of the symptoms from that treatment alone. He also applied it to a case of commencing gangrene of the foot after amputation of the great toe and its metatarsal bone. But the actual result of the treatment in these cases unhappily time did not allow us to see.

Of the general management of patients in this large hospital I might say much, did space permit; but I will confine myself to stating a few facts. It would mightily astonish some of the worthy governors of Guy's Hospital who are so anxious to curtail the privileges of students in their wards, if not to banish them altogether, could they see the every-day work in the wards of a French hospital. To one who has gone through most of his training at an English medical school it is positively startling. There is no question of who is to be supreme in the wards. The "interne" is absolute master of the situation in the absence of the visiting surgeon and physician, and without any fear of governors or committees before his eyes gives his orders, and they are obeyed. I must confess that the other extreme is

often reached, and a restraining influence is sadly needed. At a large provincial hospital visited by my fellow-traveler, on his applying for permission to view the wards he was introduced to a couple of unqualified students who informed him they had just been performing the operation of tracheotomy without success. This was indeed an index to a state of affairs calling loudly for reform, and it is to be feared the same system in a greater or lesser degree pervades most French hospitals.

One other point. In most French hospitals there is one ward set apart for accouchments, but this continually overflows into the general medical and surgical department; and as there is no regular obstetric physician, the women are attended in their labors by the physician or surgeon into whose general ward they may happen to be admitted. It is a wonder that any of these poor sufferers escape with their lives, for no precaution is taken to guard them from surrounding infection. Placed in a general ward, the lying-in woman may have in the bed on one side of her a patient dying of pyemia, while on the other may be a case of scarlet fever or diphtheria. This is, unhappily, no exaggeration; and I believe in no other city in the world could such things happen. Paris, first in so many arts and sciences, is last in that merciful art which assists poor women at the moment when they are most helpless and at the same time most deserving of help.

To return to antiseptics. One of the great events of the past month has been the delivery of Mr. Lister's presidential address to the Clinical Society on the "catgut ligature." In the course of it he gives with admirable clearness and minuteness the results of many years' patient labor and investigation. As it has been published in all the medical journals, I need not do more than refer to it and add how thoroughly it will repay the careful reader. Mr. Lister explains in the fullest detail his new method of preparing ligatures with chromic acid, with which he gets the happiest results, and is enabled to "season" his ligatures in a few hours instead of weeks as under the old system. I can not resist quoting his perfectly clear description of this. He says:

"I dissolve one part of chromic acid in four thousand parts of distilled water, and add to the solution two hundred parts of pure carbolic acid. In other words, I use a one-to-twenty watery solution of carbolic acid; only the carbolic acid is dissolved in an exceedingly dilute solution of chromic acid. . . . As soon therefore as the preparing liquid has been made catgut equal in weight to the phenol is introduced into it. If you have too large a proportion of catgut it will not be sufficiently prepared; if you have too small a quantity it may run the risk of being over-prepared. At the end of forty-eight hours the chromic element of the liquid has nearly spent itself, and precipitation is complete. The catgut is then taken out of the solution and dried, and when dry placed in one-to-five carbolic oil. It is then fit for use. I have here a sample of catgut prepared by this method. Although it has been steeped in warm blood-serum since this morning at 11 o'clock, it is still translucent and firm without being rigid, and a reef knot tied upon it holds with the most perfect security."

The over-preparation or insufficient preparation to which the professor alludes has reference to the rigidity of the ligature. This may be too hard, and may so cut its way out of the tissues like a piece of glass, with much suppuration attending the process; or, on the other hand, it may be so soft as to be too readily dissolved and untied, causing grave risk of hemorrhage. As I said before, the whole address is eminently worthy of the most careful reading. The greatest surgeons have always been the most attentive to the minutest details, and I think Professor Lister's address is another illustration of this.

I mentioned in my last letter some of the interesting and remarkable results which have been obtained in locomotor ataxy by the operation of nerve-stretching, applied to one or other of the large nervous trunks, particularly with respect to the relief afforded to the principal symptoms, pain, incoördination, etc. The other day at University College Mr. Marshall stretched the great sciatic nerve on the right side in a man suffering from locomotor ataxy. The operation was performed at

the request of Dr. Bastian, under whose care the patient was. Mr. Marshall cleared the nerve sufficiently to be able to grasp it between the finger and thumb, and then made traction first upon the lower, then upon the upper end. By operating in this way the amount of force exerted can be more accurately gauged than when traction is made by a director passed under the nerve. Moreover, the sharp edge of the director might seriously damage the individual nerve tubules. The result of Mr. Marshall's operation will be made public shortly.

In France Monsieur Gillette has performed this operation for the relief of congenital epilepsy, the nerves stretched being the median and musculo-cutaneous trunks in the upper third of the arm. The operation was performed December 31, 1880, and the attacks, which formerly numbered about ninety a month, have fallen to eighteen since January 1st; while they have diminished in duration and intensity as well as in number, at the present time most of them being merely vertigo or loss of consciousness lasting a few seconds only. The wounds healed by first intention. For about eight days there was some numbness in the area of the musculo-cutaneous nerve, but this latter phenomenon speedily passed off.

La France Médicale publishes the account of a case of chronic bronchitis cured by a treatment seldom employed or even heard of in England. The account is too long to transcribe here *in extenso*, but the main facts are interesting. The patient was a young woman aged twenty, who had suffered from chronic bronchitis for three years before she became an inmate of *La Pitié*, which she entered October 6, 1880. Her face was red and puffy on admission to the hospital, but her legs were not edematous, and she seemed to have a tolerable amount of strength. She had severe dyspnea, with incessant paroxysmal cough and suffocative attacks at night, accompanied by abundant mucous and muco-purulent expectoration. There were also physical signs characteristic of severe chronic bronchitis. All ordinary treatment having been tried without success, on November 27th the thermo-cautery was applied by way of counter-irritation. On

the first application a large number of very superficial punctiform cauterizations were disseminated over the dorsal region. On the following day an improvement was manifest in the patient. The cough and dyspnea were less, and she had slept, while the moist râles were less evident. On November 30th and December 3d the thermo-cautery was again applied, with the result that the cough and dyspnea ceased, the emphysematous resonance was diminished, and the patient was able to get up. On the 7th, 15th, and 21st of December other applications were made, and on the 29th the patient was discharged. The physical examination showed nothing but a slight want of elasticity over the right apex and a slight roughness of breathing in the corresponding supra-spinous fossa.

The result obtained in this was perhaps exceptionally good, but in France the treatment is no novelty. Besides chronic bronchitis, other diseases may be treated with great advantage by ignipuncture. In incipient consolidation and persistent pleuritic effusion much good might be done with the thermo-cautery, which in France is also a most important agent in the treatment of spinal complaints, and is one of the chief sedatives in locomotor ataxy. Many hospital physicians are now beginning to employ it more extensively; notably Dr. Broadbent, who has obtained from its use some very strikingly successful results in cases of disseminated sclerosis.

A great deal of discussion has been caused by the announcement that the "honor" of knighthood is to be conferred on Dr. Bennet, the outgoing president of the College of Physicians, and much disgust is expressed that a slight distinction usually reserved for civic and municipal authorities should be thought good enough for the head of a learned profession. A K.C.B.-ship and the position of privy councillor would be honors far more worthy of the medical profession and the dignity of the College of Physicians. As the *St. James Gazette* pithily said, "By the favor of the crown Dr. Bennet is to become a knight. If the president of the Royal College of physicians thinks that knighthood can add to his dignity, a knight no doubt he will

be; but the announcement serves to show that now, as in the past, the least-prized honor is held to be good enough for a leading member of the noblest of professions." They manage these things better abroad. A week or two ago Dr. Bacelli, a practicing physician of eminence in Rome, was appointed minister of public instruction. This week Dr. Alvarenza, of Madrid, has been summoned to the Privy Council with the dignities of a royal counsellor. M. Broca had just been nominated a senator before his death—a dignity conferred on Larrey, Nelaton, and Bert. The French Senate has never been without its medical members, while in the Chamber the medical deputies form a distinct party and have considerable power. In Germany Dr. Wilson married a princess of Würtemberg, and he and his wife reside at Breslau, much respected by the inhabitants of that city. Madame Esmarch, wife of the celebrated surgical professor at Kiel, is the aunt to Princess Victoria, of Schleswig-Holstein, married the other day to Prince William, of Prussia, the future emperor of Germany. It is only in England that the meanest recognition is bestowed on the medical profession.

Reviews.

Fever: A Study in Morbid and Normal Physiology. By H. C. WOOD, A.M., M.D., Late Professor of Botany and now Professor of Materia Medica and Therapeutics and Clinical Professor of Diseases of the Nervous System in the University of Pennsylvania, Member of the National Academy of Sciences, etc. (Smithsonian Contributions to Knowledge, 357.) Philadelphia: J. B. Lippincott & Co. November, 1880. Pp. 258. 4to.

Drs. Wood and Horace Hare projected an exhaustive treatise on the physiology of fever, Dr. Hare to have conducted the chemistry of the undertaking; but his death broke this part of the arrangement, and Dr. Wood completed his investigations, which are presented in the volume under notice. It appears to have been contributed to the Smithsonian Institution, as an announcement on the reverse of the title-page is in these words: "Reprinted by permission from the stereotype plates of the Smithsonian Institution 'Contributions to Knowledge,' No. 357."

The headings of the four chapters are: The Essential Symptom of Fever; Concerning the Methods by which the Animal Organism Controls the Production and Dissipation of Heat; The Thermic Phenomena of Fever; The Theory of Fever. Twenty experiments on animals and the management of a man with sunstroke and another with acute rheumatism, suddenly invading the brain and running up the temperature to 108.8°, brings the author to the conclusion that "excessive temperature is the essential symptom of fever." Incidentally this chapter sets forth that the appropriate treatment of *coup de soleil* is the cold bath, or at least cold applied in some way—a bit of practical knowledge that may come handy to many a practitioner.

Altogether one hundred and twenty-one experiments were performed on animals, and the fruit of countless experiments

and observations by English, German, French, and other foreign writers has been gathered, assorted, and utilized in building up a theory of fever that is creditable to the author and valuable to the world. If time and space permitted it would be an agreeable task to follow Dr. Wood in the lucid and logical manner in which, step by step, he reaches his conclusions. Forbidden this, there is left the privilege of quoting his final paragraph, as follows:

Bearing these facts in mind, the theory of a causation of fever becomes, to my mind at least, very plain. It is simply a state in which a depressing poison or a depressing peripheral irritation acts upon the nervous system, which regulates the production and dissipation of animal heat—a system composed of diverse parts so accustomed to act in unison continually in health that they become, as it were, one system, and suffer in disease together. Owing to its depressed, benumbed state, the inhibitory center does not exert its normal influence upon the system, and consequently tissue change goes on at a rate which results in the production of more heat than normal and an abnormal destruction and elimination of the materials of the tissue. At the same time the vasomotor and other heat-dissipation centers are so benumbed that they are not called into action by their normal stimulus (elevation of the general bodily temperature), and do not provide for the throwing off the animal heat until it becomes so excessive as to call into action, by its excessive stimulation, even their depressed forces. Finally, in some cases of sudden and excessive fever, as in one form of so-called cerebral rheumatism, the enormous and almost instantaneous rise of temperature appears to be due to a complete paralysis of the nervous centers presiding over heat production and dissipation.

The points in this paragraph will be observed as reaching deep into the arcana of the etiology of the chief phenomena of that diversified pathological condition which we denominate, in all its varieties, fever. Perfect knowledge in this direction will be the sure foundation of perfect therapeutics of fever.

The volume contains sixteen woodcuts of experiments on the cerebral convolutions of dogs, and is concluded with five plates illustrating some apparatus and the results of its working, used by the author in his investigations.

J. F. H.

Food for the Invalid, the Convalescent, the Dyspeptic, and the Gouty. By J. MILNER FOTHERGILL, M.D., Edin., Member of the Royal College of Physicians of London, Associate Fellow of the College of Physicians of Philadelphia, etc., and HORATIO C. WOOD, M.D., Professor of Materia Medica and Therapeutics and Clinical Professor of Diseases of the Nervous System in the University of Pennsylvania, Member of the National Academy of Science. New York: McMillan & Co. 1880. Pp. 157.

Something to eat is a necessity of human life. Something good to eat is a desire of all men. Something proper to eat is an essential of health. The raw material for wholesome and palatable food, and it served in an unscientific and unwholesome style, seems to be the average condition of affairs in the United States. The industrious exhorter against the poisonous effects of alcohol on the human system raises on us the *cutis anserinus* as he details the horrors of the slaughtered hecatombs of the *beveragium infernalis*; but if some eloquent tongue had the facts of the miseries and crimes that come of bad cooking to tell, he would stimulate the inhibitory center of our sanguineous circle until the arrested current would coagulate while he depicted the writhing agonies of the kilotombs of the American cuisine.

A cook-book therefore scientifically conceived and popularly executed is a boon, and a cook-book prepared by doctors for the ill and the valetudinarian should have a special and higher value, because the appetite of these classes is uncertain, the digestion frequently defective, and the assimilation imperfect. The volume under notice is a cook-book prepared by two exceedingly clever doctors to enable other doctors not so apt with culinary knowledge to name the dishes and the method of preparing them for the invalid, the convalescent, the dyspeptic, and the gouty, and, when desirable, have an eye to economy as well. And the two hundred and ninety-eight recipes for preparing as many dishes bear the impress of being admirably adjusted for the purpose intended; so arranged and classified, in fact, that "by simply ticking with a lead-pencil such receipts as may be deemed suitable for the individual case the doctor can in a moment

provide a full dietary for his patient," as stated in the author's prefatory note.

The first twenty-seven pages are occupied by an introduction giving something of the scientific principles that underlie digestion and should be the foundation for the selection and preparation of food and beverages for both the well and the ill. For the major part this introduction is presented under the light of the most recent investigations in physiology, but at points there crop out sentiments that are survivals of exploded theories.

Foster's Physiology is appealed to for the composition of certain proximate principles—and it is good authority—for example, albumen, bile salts, and renal solids; but it is equally good for its teachings concerning the formation of the digestive fluids. And if credence had been given to Foster's lessons on the production of pepsin and pancreatin the authors would hardly have recommended the preparations of the stomach "of our useful friend the pig" as pepsin, nor the pancreatic extract with an alkali, as passing intact through the human acid stomach to aid intestinal digestion near its close. Foster teaches that both pepsin and pancreatin are created only at the moment of use from proximate principles prepared and held for that end by the special glands of the proper organs, and consequently whatever digestive energy may reside in the extract of the stomach and pancreas "of our useful friend the pig" it is not due to pepsin nor pancreatin, nor even to pepsinogen nor zymogen.

Our authors lay a heavy hand on some popular and favorite ideas; for example, this: "The prevalent impressions about beef tea show how little real knowledge exists about our food as regards our requirements. Beef tea is a stimulant rather than a food. A person may be hungered to death on it. It is a pleasant, palatable, refreshing beverage when well made. As a vehicle for farinaceous matters, or with a teaspoonful of cream in it, it is useful as food."

The book will prove a useful assistant to him who is called to give specific directions for the preparation of food for such patients as need an exact diet.

J. F. H.

Minor Surgical Gynecology. By PAUL F. MUNDÉ, M.D., etc.
With three hundred illustrations. New York: Wm. Wood & Co.

This is a recent volume in Wood's Library of Standard Medical Authors. It contains, including index, nearly four hundred pages of closely-printed matter. Dr. Mundé brought to the preparation of this work not only great information, but considerable experience, and has accumulated the results in useful form. We believe the book will be very valuable to those engaged in gynecological practice, and interesting to all practitioners. We know no man in this country better qualified to write such a work than Dr. Mundé—no man that could do it better than he has. And yet as we look at the wealth of speculums and the wilderness of pessaries here represented we are tempted to adopt the language of an old Greek visiting a fair, "How many things there are in this world we do not need!"

The book is dedicated to Dr. Fordyce Barker. But the book is almost entirely *chirurgical*—we use the word in its etymological as well as its common meaning—and Dr. Barker is very far from being a representative of surgical or mechanical gynecology. New York has a dozen men whose fame in this special part of a part of medicine is greater than his.

John Hunter and his Pupils. By S. D. GROSS, M.D., LL.D.,
D.C.L. Oxon., LL.D. Cantab., Professor of Surgery in the Jefferson Medical College, etc. Philadelphia: Presley Blakiston.
Pp. 106.

The Philadelphia Academy of Surgery selected Prof. Gross to deliver its first anniversary address. The orator chose as his subject the life, character, and services of the founder of scientific surgery. The task which the author set for himself evidently grew in interest as he advanced in its study, until it ripened into a genuine love for the illustrious man whom, "with

the exception of Hippocrates, the father of medicine," he justly regards as "the grandest figure in our profession." As a memoir of Hunter the address is all that could be desired, and affords the profession in America a delightful opportunity to become acquainted with Hunter's life—"every incident of which is still rich with interest for us."* It was eminently fitting that the great American should tell of the deeds of the mighty Englishman, and unite in praising "the famous men and our fathers that begat us."

American Health Primers: Our Homes. By HENRY HARTSHORNE, A.M., M.D, formerly Professor of Hygiene in the University of Pennsylvania, etc. Philadelphia: Presley Blakiston. 1880. Pp. 149. 18mo.

"Multum in parvo" ought to be the motto of this number of the series of Dr. Keen's Health Primers. Dr. Hartshorne has managed to say much in this little volume that many people ought to read, and he has said it in a way that any ordinarily intelligent reader can understand. His language is free from technicalities, and where a word is used, that seems necessary to convey an exact meaning, not in common use, he defines it briefly but clearly, so that no misapprehension need exist. And this because the work is for popular instruction, not for professional reading.

Chapter I is an introduction showing the need and value of healthy homes, and then follow ten other chapters, one each on Situation, Construction, Light, Warmth, Ventilation, Water-supply, Drainage, Disinfection, Population, and Workingmen's Homes. And each of these topics has been handled with facts, figures, and arguments, in such manner as to be exceedingly rich in information that every body who is about to build a

* Luther Holden, Esq., Hunterian Oration, R. C. Surgeons, 1881.

house, or who owns a house, or who lives in a house, or who thinks about camping out ought to be in possession of. All doctors ought to read the primer and then induce their clients and friends to study and profit by it.

J. F. H.

Drainage for Health, or Easy Lessons in Sanitary Science.

By JOSEPH WILSON, M.D., Medical Director U. S. Navy. Philadelphia: Presley Blakiston. 1881. Pp. 68, large 8vo.

Many well-known truths are told in this book; some of them briefly, plainly, pleasantly; some otherwise. Forty woodcuts illustrate the text, chiefly concerning drainage-pipes and apparatuses. The style of composition is unique, and is intended to be attractive, and to a large proportion of readers perhaps it will prove so. The familiar facts presented will bear repeating to those to whom they are familiar, if such have leisure for encores, and to others the contents of the volume will be instructive.

J. F. H.

A Treatise on Oral Deformities as a Branch of Mechanical Surgery.

By NORMAN W. KINGSLEY, M.D.S., D.D.S., President of the Board of Censors of the State of New York, State Dean of the New York College of Dentistry and Professor of Dental Art and Mechanism, Member of the American Academy of Dental Science, of the Odontographic Society of Pennsylvania, and of the Odontological Society of New York, etc. With over three hundred and fifty illustrations. New York: D. Appleton & Co. Pp. 541.

It may be safely said that Dr. Kingsley has presented in this portly volume a really good work. When the second edition is called for, which we predict will be soon, it can be made the very best treatise on oral deformities extant by being reduced just one half from its present size.

A Manual for the Practice of Surgery. By THOMAS BRYANT, F.R.C.S., Surgeon to and Lecturer on Surgery at Guy's Hospital, etc. Third American, from the third revised and enlarged English edition. Edited and enlarged for the use of the American student and practitioner, by JOHN B. ROBERTS, A.M., M.D., Lecturer on Anatomy and on Operative Surgery in the Philadelphia School of Anatomy, etc. With seven hundred and thirty-five illustrations. Philadelphia: Henry C. Lea's Son & Co. Pp. 1005.

Both the previous editions of this massive work were reviewed at some length in our pages. Bryant's *Surgery* is the simple, modest record of the experience, the achievements, the observation, the thought of a strong, active, painstaking surgeon who, uniting to an uncommonly well-balanced mind the best opportunities, has supplemented both by an industry and conscientiousness which caused him to improve them to the full. The American editor, Dr. Roberts, has by his original labor already placed himself among the leaders of the younger surgeons of the country. His annotations to the present work are not merely numerous, concise, and judicious, but they evince such acquaintance with surgical practice on both sides of the Atlantic as to afford a certain guarantee that this volume is brought fully abreast with the general surgery of the period.

A Practical Treatise on Diseases of the Skin. By LOUIS A. DUHRING, M.D., Professor of Diseases of the Skin in the Hospital of the University of Pennsylvania, etc. Second edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co. Pp. 644.

Whatever Dr. Duhring has written has commended itself to us as being thoroughly good, and we have said as much to our readers. The present volume if well studied will make it not only possible but absolutely easy for the general practitioner to familiarize himself sufficiently for all every-day uses with cutaneous affections. As such the work is of extraordinary value.

Handbook of Systematic Urinary Analysis, Chemical and Microscopical: For the Use of Physicians, Medical Students, and Clinical Assistants. By FRANK M. DEEMS, M.D., Laboratory Instructor in the Medical Department of the University of New York, Member of the New York County Medical Society, Member of the New York Microscopical Society, etc. New York: The Industrial Publication Company. 1880. Pp. 30. 12mo.

Surely in these latter days if any one be found ignorant of a suitable method of examining urine for clinical ends it will not be because plain and efficient instructions for that purpose are not both abundant and cheap. This thin book in plain and simple language covers all the steps required to be taken for the sufficient examination of all kinds of urine for diagnostic purposes. It begins at the beginning and continues systematically to the end, pointing out in an appropriate way the apparatus required, the reagents needed, and where and how they may all be obtained.

J. F. H.

Photographic Illustrations of Cutaneous Syphilis. By GEO.

HENRY FOX, A.M., M.D., Clinical Lecturer on Diseases of the Skin, College of Physicians and Surgeons, New York; Surgeon to the New York Dispensary, Department of Skin and Venereal Diseases. Forty-eight quarto plates from life, colored by hand, with descriptive text. In twelve numbers, issued monthly, \$2 each. New York: E. B. Treat, 757 Broadway.

These illustrations may be regarded as the pendant of the illustrations of cutaneous diseases by the same author, and of which we had occasion as they appeared to speak in terms of the very highest praise. It gives us pleasure to be able to use similar words touching the present series. The descriptions contained in the text are concise, yet sufficiently full, while the words on remedies and treatment are most fitly spoken.

Clinic of the Month.

ON MORPHIA AND CHLOROFORM COMBINED TO PRODUCE AND MAINTAIN ANESTHESIA.—Alexander Crombie, M.D., Superintendent of the Medical School and Mitford Hospital, Dacca, Bengal, in a paper which he contributes to *The Practitioner*, says:

The practice I believe to be one the importance of which can not be overstated, and which, in my hands, has robbed chloroform almost entirely of its inconveniences and risks. The advantages derived from the combination are, first, the prolongation of the anesthetic effect of the chloroform, once it has been established; and secondly, the small quantity of chloroform required to keep it up afterward. The first advantage is most conspicuous in operations about the mouth and face. The prolongation of the anesthesia originally induced in this way is often so great as to enable me to perform operations of the first magnitude without being interrupted by the necessity of recommencing the inhalation of chloroform on account of the patient returning to consciousness in the middle of it. The benefit both to the patient and surgeon in these cases is too obvious to require mention.

But the chief benefit lies in the fact that so very small a quantity of chloroform is required to reproduce anesthesia which has been originally induced under the coöperation of the combined drugs, as long as the influence of the narcotic alkaloid continues. My experience is, that once complete surgical anesthesia has been so established, from half a dram to a dram of chloroform is usually sufficient to keep it up for half or three quarters of an hour; that is to say, during the whole of the time required for all ordinary surgical operations. I have thus, I flatter myself, been able to eliminate from my practice most of the risks and complications of an overdose of chloroform. Among the latter I include vomiting, which I rarely see now as the consequence of performing an operation under chloroform when morphia has been injected under the skin. Vomiting in some cases occurs very early, and often before anesthesia is complete; but in the later stages of an operation or after removal to the ward it is very rare indeed. I therefore

invariably use morphia in combination with chloroform in cataract operations; for although the long continuance of the anesthesia is of no consequence in these cases, the risks of vomiting are more surely avoided.

Last, but certainly not least, chloroform asphyxia has practically ceased to form part of my experience of the dangers of that anesthetic. It is true that during the first five or eight minutes after beginning the inhalation of chloroform, while the stage of excitement yet lasts, even after morphia has been injected under the skin, I not infrequently see the respiratory movements stop in a state of full inspiration. It is easily removed by taking away the chloroform from the face and then giving one or two smart slaps with the open hand over the epigastrium or forcibly depressing the lower ribs. It sometimes constitutes a considerable obstacle to the administration of chloroform when it recurs, as it sometimes does whenever the inhalation is recommenced. It usually disappears before anesthesia becomes complete, and if watched for and immediately removed is without risk. Very different is the arrest of the function of respiration in a state of expiration, which occurs during deep surgical anesthesia from paralysis of the respiratory center from the continuous inhalation of large quantities of chloroform. This grave danger has not occurred in my practice since I have made use of the combination of morphia and chloroform I am now advocating, and when the precautions I insist upon have been faithfully carried out. I attribute the immunity from this danger also to the small quantity of chloroform I require to give in order to keep up complete anesthesia when it has once been induced under the influence of morphia, and also to the great care I take that the free ingress and egress of air to and from the lungs are never for a moment interrupted.

The common liquor morphiæ hydrochloratis has never in my hands produced the smallest pain or irritation. Then an ordinary hypodermic syringe holds just the quantity of it—twenty minims—which I find to be usually sufficient. Were I practicing in Europe I should probably find it necessary to employ a larger quantity of morphia than one sixth of a grain—say a fourth or a third, which was the quantity used by MM. Labbé and Guyon.

I use for the administration of chloroform a metal cup with a perforated bottom, and with a piece cut out of the side for the reception of the nose. The chloroform is sprinkled on a piece of sponge which occupies the bottom of the cup. The whole fits loosely over the nose, mouth, and chin—so loosely that it is impossible for the most careless administrator to prevent the freest admission of air to the nostrils at

each inspiration. This is not the case with a folded napkin or towel which can be tucked closely around the cheeks and under the chin.

I next insist not only on there being nothing tight around the neck and waist, but on the upper part of the abdomen and lower part of the chest being bared; and the person charged with the administration of the chloroform is directed to divide his attention solely between the state of the respiration, which he is thus enabled to watch in the clearest way, and the condition of the sensitiveness of the cornea. The rise and fall of the epigastrium and lower ribs are the best indication that air is entering and leaving the lungs freely.

As soon as possible—that is to say, before there is complete anesthesia—as soon, in fact, as the relaxation of the muscles will admit of it readily, I cause the condyle of the lower jaw to be pushed forward out of the glenoid cavity on to the eminence in front. In other words, I insist on the teeth of the lower jaw being brought forward well in front of those of the upper, and retained in that position during the whole duration of the operation. This is easily done by pushing the bone forward by means of the thumbs placed behind the posterior margin of the ramus and angle of the jaw. This movement forward of the lower jaw has the effect of dragging forward the tongue by its root, and at the same time the hyoid bone, in consequence of the attachments to it of the mylo-hyoid, genio-hyoid, genio-hyoglossus, and genio hyoid muscles. Since I adopted this expedient, in 1873, I have entirely discarded the use of the barbarous tongue-forceps. The traction exerted by the displaced lower jaw on the hyoid bone and root of the tongue is much more efficient in preventing occlusion of the glottis, by the tongue falling backward during deep anesthesia, than can be effected by forcible traction by forceps applied to its tip. If this displacement of the lower jaw forward is properly carried out there will not be the least stertor or other sound of impeded passage of air to and from the windpipe during a long operation performed in a condition of the deepest insensibility. If that insensibility is produced by the combined use of morphia and chloroform no difficulty will be found in keeping the jaw in that position for any length of time, for the chloroform is only applied to the face at long intervals, during which the administrator has nothing to do but to keep the jaw forward and touch the cornea from time to time, the inhaler lying at one side. Should consciousness partially return the jaw can be kept in position by one hand while the cup is being reapplied for a few seconds to the face. If during the performance of an operation I hear the least noise in the breathing I know that this traction on the root of the tongue is not being efficiently maintained, and a word of warning to the assistant

charged with watching the anesthesia suffices, by directing his attention to it, to restore that free and noiseless respiration upon which I insist throughout every operation.

By these means, by attention to these details, and by the combined subcutaneous use of morphia, asphyxia has practically ceased to form part of my experience of the risks of chloroform as an anesthetic. This I attribute to the small aggregate quantity of chloroform required to keep up deep insensibility during the whole time required for all ordinary surgical operations when morphia has been injected under the skin.

Of the other great risk of chloroform—paralysis of the heart—I have happily had no experience either before or since I adopted my present practice, and I am aware that this terrible accident sometimes occurs during the first few minutes of the inhalation of chloroform before anesthesia has been established. But the danger of this accident occurring during the stage of deep insensibility will, it stands to reason, be diminished in proportion to the smallness of the dose of the anesthetic required to cause and reproduce the anesthesia. The combination of the hypodermic use of morphia with the inhalation of chloroform would, I am confident, if universally practiced, by acting in this way materially lessen this grave danger. One death from chloroform is said to occur in five thousand cases; so that the experience of any one practitioner is not sufficient to form an opinion of the value of any procedure calculated to avert its risks. But if I have eliminated, as I believe I have, from my practice one of the dangers of chloroform—paralysis of the function of respiration due to overdoses of the drug—it is reasonable to think that an expedient whose chief value lies in the smaller doses required to produce the desired effect will serve to diminish other risks arising from the same cause.

ON SKIN AND EPIDERMIC GRAFTING.—Dr. James E. Pilcher puts this interesting subject in the following simple way in the January number of that sterling journal the *Annals of Anatomy and Surgery*:

The grafts, when placed in position, usually behave somewhat as follows: At about the second day the outer horny layer begins to separate, so that by the fourth day only a faint, pale spot marks the insertion, or there may be left no evidence at all. By the sixth day a faintly vascular tuft of granulations appears here. This becomes glazed, and in a few days more the usual appearance of a cicatrix is found. The patch is usually circular, and presents slight ridges. Its aspect as a

whole is difficult to define, although it has been said to bear some resemblance to a limpet-shell. This patch continues to increase in size until it reaches its maximum, which is rarely more than two centimeters in diameter. The average is about one centimeter.

The tissue formed is not skin proper, but what is called cicatricial tissue, and is marked by a liability of the newly-healed surfaces to a rapidly-destructive ulceration under slight disturbances. Practical observation has demonstrated that here, where the growth of epidermis is rapid and from a large number of centers, the resulting cicatrix is much less violently contractile in its tendencies, much softer and more skin-like than the ordinary cicatrix, and much less liable to destructive ulceration.

Grafting is indicated in all cases where there is loss of integument, whether of long standing or immediately after granulation has set in. It is indicated—

1. In all wounds in full and uniform granulation where there is slow healing or where we desire to accelerate it.

2. In chronic wounds or indolent ulcers of old or cachectic persons. It may be used with advantage in varicose ulcers with callous margins.

3. In those cases of extensive wounds where spontaneous cicatrization would be attended with considerable retraction of the parts, as in burns and scalds, I would lay especial stress upon this indication, since by following it up conscientiously many cases of great deformity can be prevented.

4. In wounds of hard surfaces covered with skin only, as in front of the tibia.

5. In cases of deformity from contraction of old cicatrices a portion of the old cicatricial tissue should be dissected up in such a manner as to give to the parts their natural appearance and mobility; then upon the granulating surface thus obtained epidermic grafts should be introduced.

6. In gaping amputation-wounds.

7. In ulcers and granulating surfaces upon mucous membranes, as in the os uteri and vagina, where a hard, contracted cicatrix is undesirable.

In addition to these which I have gathered from general practice, M. de Wecker gives the following indications in ophthalmic surgery: (a) It ought always to be employed in cases of burn of the eyelids or neighboring parts which give rise to suppurating wounds, and by faulty cicatrization of which deformity or displacement of the eyelids would be caused; (b) It can be very advantageously used in cases of partial

or complete ectropion of the eyelids in consequence of cicatricial contraction in their neighborhood—burns, caries, fractures, etc.; (c) [As modified by Wolfe] It may with advantage take the place of all blepharoplastic operations; (d) It ought to be employed in all cases in which the eyelids have undergone a considerable loss of substance in consequence of an accident, or after an operation from which a suppurating wound remains.

Before introducing grafts the patient should be in the healthiest condition possible, and the surface upon which they are to be applied should be prepared by careful tonic treatment and brought as nearly as possible to the health standard, the most favorable condition for the reception of grafts being that the ulcer should be in a condition of active, healthy granulation, and the more nearly that is attained the less danger is there of the failure of the graft.

The grafts should be obtained preferably from a wart, and, failing to get that, from some portion of the patient's body, if he be in a healthy condition, or from some other healthy individual. The epidermis, from most conveniently the forearm, should be raised with a pair of forceps and a sharp scalpel passed under only sufficiently deep to draw blood. The piece thus obtained should be divided upon the thumb-nail into bits having the diameter of about a millimeter. Should a wart be obtained, it may be treated in the same manner. Whole warts will not answer the purpose. The granulating surface then having been thoroughly cleansed and bathed with an antiseptic lotion, the bits of epidermis already obtained should be laid upon it about a half centimeter distant from one another and from the edge of the wound. All should now be covered with antiseptic and protective lint. This should not be removed until the fourth day, when the surface should be carefully cleansed with an antiseptic spray, or carbolized wash should be allowed to trickle over it, great care being exercised not to disturb the grafts. It should then be again covered with lint, and upon the eighth day another examination made. At this time, if necessary, additional grafts may be introduced in the manner heretofore described.

The results of skin and epidermic grafting thus practiced may be enumerated as follows:

1. A more perfect cure in all cases.
2. A cure where in many cases there would otherwise be a permanent and annoying ulcer.
3. A cicatrix more soft and mobile and less liable to destructive ulceration than in the ordinary process.
4. Entire absence of contraction or deformity.

ONE HUNDRED AND SEVENTY-TWO ANTISEPTIC ABDOMINAL SECTIONS; WITH REMARKS ON THE CAUSES OF DEATH IN THE FATAL CASES.—Dr. J. Knowsley Thornton, of the Samaritan Hospital, London, in the British Medical Journal :

After some remarks as to the details given in the printed tables which accompanied the paper, the author pointed out certain further information which should accompany statistical tables of operation cases, viz: 1. An account of all cases of abdominal tumors seen during the time covered by the tables but not operated upon, with the reasons why no operation was performed. 2. The highest temperature and pulse, with the day after operation upon which they were respectively recorded. Such additional information was necessary in order to show the success of the individual surgeon in dealing with ovarian or other similar diseases, and the general progress in this branch of surgery; and also to show the well or ill doing of the cases which recovered after operation. The fact that all the cases had been treated on Mr. Lister's method, and nearly all by the complete intraperitoneal ligature, was dwelt upon. Common methods of treatment in a large series of cases were especially useful in extending knowledge, by affording material for comparison with other methods. The importance of accurately following the teachings and practice of Mr. Lister, to the exclusion of so-called "modified Listerism," was insisted on. In the author's hands, the pure Listerism had reduced the mortality in the most common operation in the tables (ovariotomy) from 23.94 per cent to only four per cent; a result altogether beyond the mere improvement to be expected from increased experience in performing the operation. The question of drainage, by means of Dr. Keith's improved form of Kœberle's glass tube, was then discussed. The small mortality in the last seventy-five ovariectomies (four per cent) was claimed as a proof that drainage was unnecessary, if Lister's method were perfectly carried out in abdominal section; comparative statistics being given to prove the same conclusion. The question of selection of cases was alluded to in relation of two or three deaths in the last series of seventy-five cases; both were apparently hopeless, but were given the last chance; and both, though open to question as to completion, were included among the complete operations. The question as to what cases should be called complete or incomplete was discussed. A comparison of the mortality in simple and difficult cases (*nil* in the author's hands in the former); in the cases tapped or not tapped; and in those which had only one or both ovaries removed, was also given. The causes of death in the fatal

cases were given in some detail; and the bearing of the antiseptic method on the mortality was illustrated by a division of these cases into three groups. The danger arising from the transfixion or opening of a diseased fallopian tube was pointed out as a possible cause of septicemia. This was also an important question in dealing with uterine fibroids. The incomplete ovariectomies and other operations in the tables were discussed; and, passing to the treatment of uterine tumors by abdominal section, the author pointed out the difficulties in the application of Lister's method to those cases in which the uterine cavity was opened, and showed from his statistics that, whereas in cases in which the cavity was not opened the mortality was only one in eight (and that one a very exceptional case in many respects), in the cases in which the cavity was opened three out of four died. The general conclusions drawn from the whole one hundred and seventy-two antiseptic cases were as follows: 1. Simple cases recover under Lister's method with a certainty previously unknown. 2. There is not so much fever, and convalescence is more rapid than under the old method. 3. The success obtained in the more complicated cases is in proportion to the exactness with which the antiseptic method can be applied to the individual cases. 4. The accidents and complications occasionally following operation—such as hemorrhage, for example—are more easily overcome in aseptic cases. 5. There are difficulties and even dangers in the application of the method; and the more experience the individual surgeon has in it, the more readily he foresees and avoids these, and the more complete becomes his success in applying it. In a few concluding words, the author pointed out how much peritoneal surgery owed to Mr. Lister, and how much more to Mr. Spencer Wells. Without the untiring energy and success of the latter, it would never have been in the position to benefit by the method of the former.

THE SPAYING OF WOMEN. Dr Bruntzel, of Breslau (Medical Times and Gazette), has published in the *Archiv für Gynäkologie* four cases to which we would draw attention. The first case died—so to that we need make no further reference. In the second case, a widow aged thirty-seven, the operation was done for hemorrhage due to an intra-mural myoma. Ergot had been used hypodermically without benefit. Both ovaries were removed and so far as the operation itself was concerned the patient's recovery was in every respect satisfactory. She left the

hospital on the twelfth day. Three weeks after her discharge she reappeared, the bleeding having returned as badly as ever, and it persisted in spite of all treatment, the patient being still under care when Dr. Bruntzel wrote. The tumor did not diminish in size. The third case, that of a married woman aged twenty-six, was one of chronic peri-oophoritis. Both ovaries were removed. Convalescence was interrupted by an abortive attack of pneumonia, but the patient recovered and left the hospital on the twenty-fourth day. Since the operation menstruation has ceased, but the patient still complains of her old pains, which are just as they were before the operation. In the fourth case, hystero-epilepsy was the disease it was sought to cure. The patient, aged thirty-two, recovered from the operation, in which both ovaries were removed. She left the hospital on the thirteenth day. She never again menstruated; but her condition after the operation was no better, but rather worse. The removal of the ovaries did nothing whatever to relieve her. These cases are very valuable ones, adds the editor of the Medical Times and Gazette. Spaying will not cure every disease of the pelvic organs; and it is of the utmost importance for enabling us to find out what it will cure and what it will not, that *every case* should be fully recorded, and that the condition of the patient should be ascertained, not only when she leaves the hospital, but for a long time afterward.

THE TREATMENT OF MALIGNANT PUSTULE. — M. Verneuil stated, in an important communication to the Académie de Médecine on this subject, that the malignant pustule consists of three zones or regions: First, the slough or gangrenous zone with its characteristic vesicles; secondly, an indurated zone presenting on its surface other vesicles; and lastly, the zone of edema. Until recently surgeons have concentrated their attention on the central or gangrenous zone, having applied almost no treatment to the indurated zone, and always none to the zone of edema beyond poulticing and leeching. According to M. Verneuil it is important to apply to each zone special and energetic treatment.

These are—first, to destroy or excise the gangrenous part; secondly, to incise and cauterize deeply the zone of induration; thirdly, to disinfect, by antiseptic hypodermic injections, the zone of edema; lastly, to employ general antiseptic treatment, such as the internal administration of iodine or some other efficient internal antiseptic. The experiments of Davaine have shown that iodine, even in small doses, has an efficient neutralizing action on the virus of anthrax, and it is possible, according M. Verneuil, to introduce into the circulation a sufficient quantity of iodine to produce this effect. The hypodermic injections into the edematous zone should also consist of iodine, ten drops of a one-half-per-cent solution. The first case thus treated was one of malignant pustule on the arm, in which the actual cautery had failed, and amputation was contemplated; the treatment was perfectly successful. In another case the pustule was situated on the eyelid, inoculation having been effected by inadvertently scratching a pimple there. The eyelid was much swollen, and presented the characteristic vesicles and bullæ, and there was considerable edema of the whole of that half of the head. The temperature was 103° ; the patient was delirious, sleepy, and vomited continually. The pustule was destroyed by means of the thermo-cautery. In the zone of induration a series of punctiform cauterizations were made with the same instrument, to a depth of one third of an inch, and then the solution of iodine was injected in the edematous part at intervals of five centimeters. The temperature rapidly fell. The delirium, somnolence, and vomiting ceased as if by magic, and on the third day the patient was out of danger. In the discussion which followed M. Léon Labbé agreed with M. Verneuil as to the necessity of cauterization in the zone of induration, and employed it even in the edematous region. He was inclined to attribute more importance to this measure, employed in an energetic and even, as it might seem, barbarous degree, than to the injections of iodine. M. Gosselin urged the importance, before applying the treatment to every pustule which had a malignant aspect, of ascertaining if it were really anthrax, by microscopical examination

of the serum in the vesicles and of the blood. M. Verneuil, speaking from the standpoint of practical surgery, maintained that better indications could be drawn from the clinical aspect of the affection than from the presence or absence of bacteria. He had seen cases in which bacteria were found in the vesicles and in the blood, although the symptoms were benign, and others in which, in spite of the absence of bacteria, the augmenting gravity of the affection necessitated the use of the most energetic remedies.

TRACHEOTOMY BY A SINGLE INCISION.—M. de Saint-Germain has up to the present time performed two hundred and twenty-seven tracheotomies without having met with a single accident of any consequence. A declared opponent of the operation by repeated incisions made with calculated deliberation, he places the child on a table with his shoulders lying on a firm cushion, and his head hanging down, firmly supported by an assistant. He fixes the larynx with his left hand, seizing it by its lateral and posterior parts as if he would separate it from the spinal column, and then plunges a bistoury with a straight and narrow blade into the crico-thyroidean membrane, having its cutting-edge toward the sternum. Passing this in to a depth of fifteen millimeters, he divides, by a sawing movement without pressure, the cricoid cartilage, the two or three first rings of the trachea, the isthmus of the thyroid, and the skin. While removing the instrument, he prolongs the incision a few millimeters in the skin to facilitate the flow of the fluids. The edges of the wound are then separated by the dilator and the canula is introduced. If the slight hemorrhage does not cease very quickly, it is arrested by substitution of a larger canula. (*Gaz. des Hop.*)

ANEMIA OF CHLOROSIS.—

R Ferri vini amari, ʒ vijss;
Tinct. nucis vomicæ, ʒ iv;
Liq. potass. arsenit., ʒ ij.

M. S. A dessertspoonful in a glassful of water just after each meal. (Gaillard Thomas.)

MAIZE AND MAIZENIC ACID.—Dr. Vauthier, in the *Archives Med. Belges*, concludes a paper on these products of the Indian corn as follows:

1. The action of maize is always favorable in all affections of the bladder, whether recent or chronic.

2. Maizenic acid is the active principle of the stigmata of maize, and it alone contains the therapeutic properties.

3. The diuretic action is not constant. It is met with in cases of acute traumatic cystitis and in cases of retention; but here the improvement in micturition is due to the recovery of the affected organs, and not directly to the action of the maizenic acid.

4. The best results are observed in uric and phosphatic gravel, in acute cystitis, whether simple or due to gravel, and in mucous or mucopurulent catarrh.

5. In the cases observed by the writer the ordinary remedies for these affections had already been employed without benefit, while the maize never failed to effect a cure. In connection with the maize simple and medicated vesical injections were employed.

6. Maizenic acid, moreover, has the power of dissolving calculi by its chemical action, and not only vesical calculi, but also all the other calcareous concretions that are met with in the human system. Hence its use seems indicated in cases of gout and rheumatism, as well as in affections of the urinary organs.

The preparations used by the author were the infusion (ten parts of corn silk to one hundred of boiling water, with syrup *ad libitum*; dose, a tablespoonful every two hours), the extract in doses of one and one half to three grains, and maizenic acid in doses of one eighth of a grain in pill or mixture. (North Carolina Med. Jour.)

TREATMENT OF MAMMARY ABSCESS.—Dr. Hiram Corson, of Conshohocken, Pa., in the *American Journal of Obstetrics*, after alluding to the usual routine of cloths steeped in hot vinegar, plasters, and poultices, states that for the past twenty-seven years he has used no other remedy but cold applications, his method being to fill a bladder part full with cold water and ice in it and apply to the inflamed part. This application of ice-water affords almost immediate relief, and if suppuration has not taken place will always prevent it. And indeed in cases which have already "suppurated, been poulticed, and broke," or been lanced, this

method is "just as applicable, efficient, and safe." "I have very often been called to women whom I have found with a breast painful, swelled, and red over the swelled part—the result, the patient would tell me, of a 'chill,' which happened in the night and fell right away on the breast, since which time she had had no rest. I here at once applied the ice, and in no instance, if suppuration had not already taken place, have I failed to disperse the inflammation, at the same time that I brought comfort to the patient. In some cases I have found the suppurating process so far advanced that nothing could prevent it; but even here I apply the ice, knowing that it will give the woman great comfort, by removing the heat, allaying the inflammation, and thus preventing any more of the breast from becoming involved in the suppurating process." (*Obstetric Gazette.*)

SORE NIPPLES.—

R Aquæ rosæ, }
 Glycerin, } āā 3 ij;
 Acidi tannici, 3 ij.

Ft. lotion. S. Soak lint in this solution and apply to nipples. (Fordyce Barker.)

If the ulcerative process has commenced it is advisable to stop nursing, and paint the nipple with a solution of nitrate of silver, ten grains to the ounce of distilled water.

PRURITUS OF PREGNANCY.—

R Thymol, gr. xv;
 Vaseline, gr. xxx;
 Powdered brick clay, 3 iij.

Dissolve the thymol in the vaseline and rub it up with the clay. (Pallen.)

This is to be applied to the pruritic parts, washed off every day or two, and reapplied. Dr. Pallen's experience has been that excepting those cases depending on trophic-nervic causes this prescription will always effect a cure. He advises its use also in herpes and similar eruptions accompanying later months of gestation.

PHLYCTENULAR CONJUNCTIVITIS.—Dr. W. W. Seely in a recent clinical lecture thus speaks of the treatment of this affection:

For phlyctenulæ not involving the cornea to any extent the local treatment usually suffices for relief, and is extremely simple. It is never necessary to use, what is so often recommended, viz. atropia, since you will find that it often adds to the irritability of the eye. We formerly were in the habit of waiting till the irritation had subsided somewhat before beginning the local treatment, simply because the remedies used were themselves irritating.

This case presents vesicles not yet ruptured, though you see I apply the yellow oxide in vaseline (five grains to the half ounce), and assure you that tomorrow when the child is brought here it will present a vastly different aspect. You will find that this remedy can be used right from the beginning, and is altogether the best one and the only one needed so long as the cornea is not involved. If there were many sores about the face, nose, or mouth we would simply use an ointment of vaseline and boracic acid, as you have often seen, it being a perfectly bland application and thoroughly efficient.

I will say in regard to the yellow oxide in these cases that it has always been used in too strong preparations and in a vehicle that of itself is irritating. The strength I recommend is quite enough. If you are inclined to use an eye-water let it by all means be *eserine* instead of *atropine*, and procure the *salicylate* of eserine if possible, preparing a little at a time, so that it shall be fresh; that is, free from sources of irritation.

Constitutional remedies must depend upon the general state of the child; that is, whether it is in such a condition as to need internal medication on general principles, when of course cod-liver oil, quinine, and iodide of iron can be given.

Do not be tempted into using an astringent because of an accompanying catarrh, as it would be a very grave mistake. The remedy I recommend is altogether the most efficient one in *any case* of conjunctival catarrh, accompanied or not by phlyctenulæ. Often the catarrhal symptoms are the most prominent, the phlyctenulæ hardly developing, but suspected by the points of radiating injection over the bulbous conjunctiva. Under such circumstances, even though no phlyctenulæ be present, avoid all use of astringents.

THE SALICYLATE OF ESERINE.—Ordinarily the salts of eserine are unstable. Merck has therefore proposed the use of the salicylate of eserine, which salt appears to be more readily preserved

than most of the combinations now in use. This new preparation occurs in the form of bright, needle-like crystals, which are colorless, and soluble in twenty-four parts of alcohol and one hundred and thirty of water at 16° C. Solutions of one to fifty remain clear for about a week. They assume a slightly red color when exposed to light, but they are not turned brown, as are solutions of the sulphate. Besides, it is hardly necessary to use such concentrated solutions in ophthalmological practice. The salicylate of eserine contains 66.6 parts of eserine to 33.4 of salicylic acid in one hundred parts. (*La France Médicale*.)

CHIAN TURPENTINE WORTHLESS IN THE TREATMENT OF CANCER.—Mr. Henry Morris, in the *Lancet*, says it can not be relied upon to assuage pain, to diminish or alter the character of the discharges, to check hemorrhage, or promote the destruction of the growth by ulceration or sloughing. "It would have been a pleasant task to report a number of successes and to congratulate Professor Clay upon having made the discovery of a cure for cancer; but after a long and careful trial the conclusion forced upon me is, that as a cure for cancer Chian turpentine is utterly valueless."

SIMPLE CONTINUED FEVER.—

R Acid hydrobrom., ʒj;
 Syr. simplicis, ʒij;
 Aquæ, ad. ʒj.

M. S. Every hour. (Fothergill.)

Dr. Fothergill, in speaking of the above formula, says it will probably constitute *par excellence* the fever mixture of the future. It is especially indicated where there is cerebral disturbance.

Notes and Queries.

THE KENTUCKY STATE MEDICAL SOCIETY will convene at Covington on Tuesday, April 5th. Many members have expressed their intention to be present, and much seems to be expected of the meeting. Covington is an accessible place. Cincinnati with its numerous attractions is just across the river, and if but a tithe of its physicians step over and take something with us the gathering from that source alone will be a large one. The Society is certainly at present well officered. The president, Dr. Todd, is an experienced parliamentarian. Dr. McMurtry, the secretary, will give the business at his desk quick dispatch. Many papers have been promised, and no doubt the majority of these will be read. But with all these advantages it is barely possible that a few of the veterans present may feel that the meeting has not been as instructive, as altogether profitable in a scientific way as it might have been made. They may think too much time is consumed in mere business matters, and may wish that all secular concerns whatever should be confined exclusively to the first twenty minutes of the morning session, whereby a long catalogue of abuses would be corrected and a lot of most dreary nuisances abated. Indeed they may even make bold to believe that if this should become an inflexible rule* of the Society and be instantly enforced by the chair, the effect would be to keep the point-of-order man and the amendment man and the privilege-question man and the ethical man and the vote-of-thanks man, and finally the adjournment man, *et id omne genus*, in their proper places. The general feeling among mem-

*The writer introduced at the meeting in 1877 a resolution which restricted all other than scientific matters to the first hour of the morning sessions. The resolution passed into a by-law, but has never been enforced. An additional experience of four years leads him respectfully to submit that twenty minutes is full enough time to give to irregular business.

bers who have had any experience in society meetings is that all mere business concerns, all the dreary details of moving and seconding and substituting, should be rushed through in order to give time to the scientific work—the only proper work—of a society. A fixed hour for these matters and a very brief limit allowed them would secure both these objects.

Another thought which may possibly arise in the minds of the older members is that the interest and profit of some of the previous meetings of the Society were materially lessened by the length of the papers offered, and they may wish that the chair should enforce a by-law which declares that no essay or report shall exceed twenty minutes in the reading. If this law* were rigorously executed time would be had for the discussion of papers, an interchange of views would be heard, the practical experience of members elicited, and a life imparted to the sessions which would make men feel that it had been good to be there. The same law which sets a limit on the length of essays defines the time allowed to each member to air his opinions in speech.

It does seem to us that if, as suggested, all secular matters be compressed into twenty or thirty consecutive minutes daily, and the two laws to which allusion has been made be relentlessly executed, the State Society would in that moment see fall from its feet shackles which have greatly impeded its progress, and feel drop from its arms thongs which have prevented it from enfolding a larger and more active membership.

It has been said that man shall not live by bread alone. Medical societies *can not* live by papers alone. The variety afforded by discussion, by the short, quick, spirited interchange of opinions between physicians touching points of practice is just as essential to the growth, development, usefulness, and longevity of a society as other food than bread is necessary to like qualities in the individual man.

*This is the rule of the medical societies in England, and is executed without respect to persons. In the same societies ten minutes only are allowed to speakers in debate. The twenty-minutes law became one of the laws of the Kentucky Society in 1877, but, like the other introduced by the same person, has been up to this time a mere dead letter.

We indulge the hope that a change may be witnessed at Covington in the usual annual *menu* of the time-honored Society, on whose roll of honor glow the names of so many illustrious dead, and whose living membership consists so largely of the physicians of rank and experience in all parts of the State of Kentucky.

INTERNATIONAL MEDICAL CONGRESS.—The following very interesting account of the coming Medical Congress has been sent us by a valued friend in London, and should in itself stimulate the profession in America to take its full share in the great event the scope of which the letter so well describes:

Since international enterprise first took shape in our great exhibition in 1851 many international meetings have been held in this country for various purposes. This tendency toward the personal interchange of ideas has, it seems, affected the profession of medicine. On August 2d of the current year an International Medical Congress will be held in London for the first time in England. Similar meetings have taken place before in other capitals, but probably none on so large a scale as the forthcoming one is likely to assume, which, as it indeed befits the place in which it will be held, is being organized in a very complete and comprehensive manner. Medical men from many parts of the world have already signified their intention to attend this Congress, and a large number of the most distinguished professors of medicine in all its branches, in the universities and medical schools both of the Continent and of America, are expected to take part in the proceedings. It was indeed to suit their convenience that so late a period of the year was fixed upon. By August the London season is well nigh over, and London medical men in general are just about to enjoy their well-earned holiday; but it was found impracticable to insure the attendance of the continental professors at any other time.

When the presidents of our Colleges of Physicians and Surgeons to whom intimation of this Congress was first sent learned that it was the unanimous wish of the last Congress, which met in Amsterdam in 1879, that the next session should take place in England, they at once took steps to ascertain the feeling of the profession in this country, which was found to be willing to give the proposal its hearty support. An executive and other committees were formed, and the work of organization has been in full activity during the past eleven months,

so that much has been already accomplished, and some of the arrangements are even thus early completed. The Queen, recognizing the importance of the occasion, has been graciously pleased to become patron of the Congress, and His Royal Highness the Prince has also taken a personal interest in the matter and has consented to become a patron of the undertaking—a good omen for the success of the Congress and a sign of the interest taken by the royal family in a science so closely connected with the national well-being. The Congress will be presided over by Sir James Paget, and thirty-five vice-presidents have been nominated from the most distinguished scientific medical men in the United Kingdom. In order to accomplish the consideration of so large an amount of matter as seems certain to be brought forward, the Congress has been divided into fifteen sections, each of which will have a president supported by vice-presidents, a council, and honorary secretaries. These sections embrace every branch of medical science, both general and special. In glancing over the programme which has been put forth we are startled to see what a really vast range of subjects modern medicine covers.

The medical schools of different countries possess different traditions, and the members of the profession in France, Germany, and other parts of the Continent, as well as our medical cousins in America, hold different not to say conflicting views on many points of cardinal importance. The same fact even will change its outward character when clothed in the ideas of different persons. It can not, we think, fail to be important to afford an opportunity for the meeting together and for the interchange of opinions of men holding, in some points at least, views as dissimilar as the countries from which they come. Besides, disease is modified by climate and by race; some disorders are wholly endemic, while others are epidemic. Much information will doubtless be contributed on these and other matters of cosmopolitan interest. State medicine will have a section for itself in this great Congress, and it is to be hoped we shall see more clearly, by aid of its meetings, how to deal with that ever-pressing question, the prevention of disease. Military medicine and surgery also will have its section, where the hygiene of armies and the health of the soldier at home and abroad, as well as the wounds he may receive in battle, will be discussed. This, it seems, will be the first time in England our military and naval surgeons have had an opportunity of meeting together to consider the peculiar concerns of their branch of the profession. There can be no doubt as to the advantage which such an occasion, which we learn is being eagerly looked forward to, will afford; and the more so because the sections will be attended

by many of the military surgeons from France, Germany, Italy, and Austria.

The week during which the session of the Congress will continue will be a busy one. Besides the president's address and the work carried on in the fifteen sections, four general addresses will be given to the Congress by as many men of distinguished international reputation representing France, Germany, America, and England. Professor Huxley, who is a member of the College of Surgeons as well as a man of science, has, so far as the English address is concerned, accepted the task for his countrymen, and will doubtless fulfill it with all the eloquence and genius which he is known to possess. After the day's work is done the foreign guests will be shown much both of public and private hospitality. An evening has been set apart on which the Lord Mayor of London will entertain at dinner as many as the Mansion House will accommodate. The English members will upon another evening entertain their foreign *confrères* at a *conversazione* in the South Kensington Museum. The College of Physicians purposes to hold a reception at its house in Pall Mall, as also does the College of Surgeons in its Hunterian Museum in Lincoln's Inn Fields, while many entertainments of a less public character are being arranged.

It is expected that not less than two thousand medical men comprising the *élite* of the profession will assemble to do honor to this great occasion, and it is confidently hoped that scientific results will be realized and that professional and therefore public advantages will be reaped from this Congress which will amply compensate all concerned for the labor of preparation for an event which will be unique in the medical annals of this country.

INDIANA STATE MEDICAL SOCIETY.—The annual meeting of this Society has been deferred one week, and will not be held until the third Tuesday—the 17th—of May. This has been done in order to allow such members as desire to do so an opportunity to attend the meeting of the American Medical Association at Richmond, Va., May the 3d. In furtherance of the latter object, Dr. Elder, the efficient secretary of the Indiana Society, has arranged for excursion tickets to Richmond via Cincinnati, Washington, etc., good for twenty days. For further information address E. I. Elder, M.D., Masonic Temple, Indianapolis.

TRI-STATES SOCIETY.—This vigorous stripling refuses to down at the bidding of such of our cotemporaries as would relegate it to the great limbo of vanity. It again springs to the front in that usually amiable monthly, the St. Louis Medical and Surgical Journal, in a way which suggests the man in the play who, throwing himself in the attitude of the prize-fighter, says, "We will argue this philosophically and physically." The physical aspects of the argument, being plainly aimed at the Louisville Medical News and the Cincinnati Clinic, we will leave to those nimble weeklies to meet. The philosophical side of the question is clearly intended for our own peaceful selves, and is thus neatly stated by the Missourian: "We acknowledge that the meeting at Louisville was not a success; they had too many colleges to attend to." Who "*they*" is, we timidly deny. "We are," continues our friend, "compelled to say that the committees did not do their work thoroughly, and that strangers were compelled to wait while home physicians read their papers," which, we submit, in all the mildness of a sucking dove, does not consist with "*they*."

But a truce to all this captiousness. There's better work ahead than higgling over dead issues. Let's get at it. Let's cheer one another if we run; console one another if we fall. Let's set our faces toward the sun, that the shadows may fall behind us; and thus shall our thoughts ripen and our sentiments mellow against the fall of the russet leaves of another October, when such as choose may hie them to the hospitalities of the Home Guards of St. Louis. Until that auspicious time [here's that it may come to all of us many times over!], *exeunt omnes*; and, in the language of Tecumseh, "Dashed be he who does not cry 'hold, enough!'"

Ed. American Practitioner:

The Thirty-second Annual Session of the American Medical Association will be held in Richmond, Va., on Tuesday, Wednesday, Thursday, and Friday, May 3, 4, 5, and 6, 1881, commencing on Tuesday at 11 A.M.

The delegates shall receive their appointment from permanently

organized State medical societies and such county and district medical societies as are recognized by *representation in their respective State societies*, and from the Medical Department of the Army and Navy and the Marine Hospital Service of the United States.

Each State, county, and district medical society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number: *Provided*, however, that the number of delegates for any particular State, territory, county, city, or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association.

Secretaries of medical societies as above designated are earnestly requested to forward *at once* lists of their delegates.

The chairmen and secretaries of the several sections are—

Practice of Medicine, Materia Medica, and Physiology—Dr. William Pepper, Philadelphia, chairman; Dr. T. A. Ashby, Baltimore, Md., secretary.

Obstetrics and Diseases of Women and Children—Dr. Jas. R. Chadwick, Boston, chairman; Dr. Jos. T. Johnson, Washington, D. C., secretary.

Surgery and Anatomy—Dr. Hunter M'Guire, Richmond, Va., chairman; Dr. Duncan Eve, Nashville, Tenn., secretary.

State Medicine—Dr. James T. Reeve, Appleton, Wis., chairman; Dr. R. G. Jennings, Little Rock, Ark., secretary.

Ophthalmology, Otology, and Laryngology—Dr. D. S. Reynolds, Louisville, Ky., chairman; Dr. Swan M. Burnett, Washington, D. C., secretary.

Diseases of Children—Dr. A. Jacobi, New York, chairman; Dr. T. M. Rotch, Boston, secretary.

A member desiring to read a paper before any section should forward the paper, or its *title and length* (not to exceed twenty minutes in reading), to the chairman of the Committee of Arrangements at least one month before the meeting.

W. B. ATKINSON, *Permanent Secretary*.

PHILADELPHIA.

PRELIMINARY EDUCATION, OR GREEK AND LATIN STUDIES.—The question “Is it or is it not a waste of time for students to spend so many years of their life in the study of Greek and Latin, preparatory to entering the profession?” is thus answered by Mr. Luther Holden, late President of the Royal College of Surgeons of England, in his recent eloquent oration on John Hunter:

I will ask you, sir, and all who have taken part of late years in our examinations, whether you have found, as a matter of fact, that ignorance of the classics is compensated for by a knowledge of science, and that the best scholars are the worst anatomists? And this, I take it, would be the case if the question were merely one of economy of time, if the hours which are now said to be wasted in learning classics were really better spent upon other subjects. But since it is a matter of experience that those who come before us best prepared in professional subjects are just those who have had the most complete classical training, it is evident that any surrender of this training is designed as an indulgence to the less intelligent and industrious who seek admission within our ranks.

The mind must undergo a long training before it is fit to grapple with science, and if we set aside classical education we shall be ignoring the value of the best system of training which exists. My own experience as a teacher of forty years fully corroborates this. In students who have had a public school training I have found a fuller development of the logical faculty, a more cultivated memory, a greater grasp and power of combination. I have found the task of teaching them so much easier that I have no hesitation in saying that I can teach such pupils more in two months than others who have had no like education in six.

Bearing this in mind, let us strive to raise rather than lower the standard, by requiring a proof of sound classical training from those who, if they have not had this, have probably had little or no mental training whatever. Above all, let us not further hamper our noble profession, which in nine cases out of ten is taken up as a means of gaining a livelihood, with the stigma of being illiterate, nor subject the youths who are to be the future representatives of English surgery to the danger of being looked upon as “symbols” of an inferior education.

Let us most earnestly incite them to acquire, at the only time of life when they are likely to acquire it, some initiation into the thought and life of the grandest period of the world’s history. Let us not

draw a veil over their eyes which must hide from them the light of that splendid illumination before which all modern thought as well as art must bow, to the rekindling of which we owe our own brilliant outburst of energy; which is necessary, I am bold to say, to the intelligent and proper study of our most holy religion, and which holds the keys of all that is most ideal and divine in the life of man.

NAUGHTY AS THEY ARE, HOW WE SHALL MISS THEM!—The Rev. — Nutting, of Massachusetts, has been telling in a recent lecture how like angels' visits have become the youthful yankees. He says:

During the past twenty-five years the birth-rate has decreased about as fast as the divorce-rate has increased, and where the birth-rate is lowest—which is where yankees most abound—the divorce rate is highest. There is a close connection between a low birth-rate and a high divorce-rate, the relation between the two being that of cause and effect. In the history of nations there never has but three times occurred such a breaking up of the family as is now taking place among people of New England blood. When the Greek and Roman empires were about to fall, and during the French Revolution of the last century twenty thousand divorces were obtained in France in one and a half years. Bad as this is, when the population is compared, it is not equal to what is true of Rhode Island and Connecticut of late years.

WHEN SCIENTISTS OUGHT TO BE KILLED.—Prof. Huxley says he has long entertained the conviction that any man who has taken an active part in science should be strangled at sixty. In his experience ninety-nine men out of every hundred become simply obstructionists after that age, and not flexible enough to yield to the advance of new ideas. They are, in short, "old fogies;" and he thinks the world would be benefited by the operation he suggests. It may be interesting to note, by the way, that the learned professor himself is fifty-five.

FOR REMOVING NITRATE OF SILVER STAINS.—Ten parts sal ammoniac and ten parts of corrosive sublimate in one hundred parts of water will remove silver stains from the hands and linen without damage. (Amer. Jour. Phar.)

AN APPEAL TO THE MEDICAL PROFESSION.

Although the *Index Medicus* during its second year has not been so great a loss financially as in its first, its actual expenses are not yet fully covered by subscription, the mass of material and the labor involved making it a far more costly publication than any similar periodical issue. The value of the work has, however, been so thoroughly recognized by those who have practically tested it that a number of American subscribers have volunteered, in addition to their subscription, to contribute to a guarantee fund for the purpose of securing the publisher against further loss and at the same time to give the medical profession another opportunity to place the publication upon a self-supporting basis. Thus it has been decided to give it another year's trial, and it is hoped that the example set by an appreciative and generous minority will not prove fruitless. Only two hundred more subscriptions are required to permanently establish a publication which is of incalculable benefit to the whole medical world. Even where individual subscriptions can not be afforded, some personal influence among the medical societies and libraries, a few words of earnest commendation to medical friends or through the medical press, would accomplish the desired end.

It is almost unnecessary to say that the suspension of the *Index* would prove an irreparable loss to the entire profession. It is doubtful whether the publication could ever be revived under similar favorable conditions, viz. The vast material and admirable system at the National Medical Library in Washington; the capacity of the editors, equaled only by their personal sacrifice and devotion to their laborious task; a publisher who, after all his discouragement and loss, again offers his services without expecting any remuneration until the enterprise is established.

It would be presumptuous on the part of the publisher to dwell on the merits of the work itself when the most prominent men of the profession have given it their hearty support and unqualified commendation. But he should be permitted, on this very ground, to ask every one interested in the promotion of medical science and literature to aid the undertaking either in the way of individual subscription or personal influence.

The *Index Medicus* is a monthly classified record of the current medical literature of the world, compiled under the supervision of Dr. John S. Billings, Surgeon U.S.A., and Dr. Robert Fletcher, M.R.C.S. Eng. It records the titles of all new publications in medicine, surgery, and the collateral branches received during the preceding month.

These are classed under subject-headings and followed by the titles of valuable original articles upon the same subject found during the like period in medical journals and transactions of medical societies. The periodicals thus indexed comprise all current medical journals and transactions of value, so far as they can be obtained.

The Index Medicus is published monthly, and supplements all the leading medical journals (American and foreign) as a current guide and general index to all.

Subscription price per annum, postage prepaid, for United States and Canada, \$6. *Sample copies sent free on application.* The addresses of probable subscribers are desired from the friends of the enterprise.

Address

F. LEYPOLDT, *Publisher*,
13 and 15 Park Row, New York.

If one word of ours could add to the force of this appeal we would be only too glad to say it. The Index is the only work we have ever seen which, in the strictest sense, should be in the hands of every physician, since no one can do without it and keep abreast with his profession.

TO THE STATE SOCIETY.—The following arrangements have been made for transportation :

The Louisville, Cincinnati & Lexington Railway will charge one and two thirds fare for round trip.

The Kentucky Central Railroad will charge one and one third fare for round trip.

Members will pay full fare going and two thirds and one third fare respectively returning.

The Cincinnati Southern Railway will furnish round-trip tickets at two and a half cents per mile each way.

The Memphis & Ohio River Packet Company's steamers will make the usual reduction of rates to members.

LEVIN SMITH JOYNES, A.B., M.D., LL.D., was born in Accomac County, Va., on May 13, 1819; he died in Richmond, Va., January 18, 1881, in the sixty-second year of his life. Dr. Joynes's death was a calamity to the profession of the State. His now finished life was an exemplary one. "Being dead, he yet speaketh," and the influence of his life will long be felt by those who knew him and who had been associated with him.

DEATH OF DR. GEORGE ALEXANDER OTIS.—The following announcement from Dr. Barnes chronicles the death of this most excellent surgeon and modest gentleman:

WAR DEPARTMENT, SURGEON-GENERAL'S OFFICE, }
WASHINGTON, February 25, 1881. }

It is with profound regret and a sense of loss, not only to his corps, but to the medical profession, that the death of George Alexander Otis, Surgeon and Brevet Lieutenant-colonel U. S. Army is announced.

Dr. Otis, born at Boston, Massachusetts, November 12, 1830, graduated from the Medical Department of the University of Pennsylvania in 1850; established himself at Springfield, Massachusetts; was appointed Surgeon 27th Massachusetts Volunteers September, 1861. After the close of the war he entered the Medical Corps U. S. Army as assistant-surgeon; became major and surgeon 1880, having received the four brevets of lieutenant-colonel of volunteers, captain, major, and lieutenant-colonel U. S. Army for meritorious services during the war. Assigned to duty in the Surgeon-general's Office 1864, he was curator of the Army Medical Museum and in charge of the Division of Surgical Records until his death.

Surgeon Otis, with his personal observations of the surgical collections abroad, brought indefatigable industry and untiring energy to the development of the surgical and anatomical collections of the Army Medical Museum, which he has made the most valuable of their kind in the world. The compilation of the Surgical Volumes of the Medical and Surgical History of the War has placed Surgeon Otis confessedly among the most prominent contributors to surgical history.

Surgeon Otis wrote for publication no less than ten reports on subjects connected with military surgery, etc., among which are his most valuable and exhaustive reports on "Excision of the head of the femur for gunshot injury" and on "Amputation at the hip joint in military surgery." Of great culture, retentive memory, and with a remarkable facility of expression, he was, as a compiler and writer, conscientious in his analyses, giving his deductions from the facts before him with modesty but decision. While devoting himself to the preparation of the third and last Surgical Volume (now more than half completed) of the Medical and Surgical History of the War he died in this city February 23, 1881.

His untimely death will be deeply deplored, not only by the Medical Corps of the Army, but by the whole medical profession at home and abroad.

JOS. K. BARNES, *Surgeon-general.*

AN INKSTAND INSTEAD OF A CLYSTER.—Bergeret, in his work on *The Passions* (Paris, 1878), tells of a physician accustomed to make use of unusual words, who, when consulted by a woman for her husband troubled with frequent desires and ineffectual efforts to evacuate the bowels, told her, "Do not torment him with drugs by the mouth, but have recourse to *clystère par le bas*." The woman could not understand what he meant by the word *clystère*, but she did not dare ask him. She revolved the strange word in her head, she tried to repeat it twenty times, until at last it lost its true name and became upon her tongue *écritoire*. Forthwith she procured such a glass inkstand as children take to school, she smeared it with butter, and in spite of her husband's cries forced it into his rectum. Of course the unfortunate man was not made more comfortable, and wanted the inkstand out. Bergeret was called, and with considerable difficulty on his part and pain on the part of the patient succeeded in extracting it.

A POLISHED SPOUSE.—A French chemist is said to have condensed the body of his wife into the space of an ordinary seal and had her highly polished and set in a ring. He made a nice income by betting with lapidaries and others that they could not tell the material of the set in three guesses, and after pocketing the money would burst into tears and say, "It is my dear, dead wife; I wear her on my finger to keep alive pleasant remembrances of her."

ORTHODOXY.—The parish priest of Sendomi, in the diocese of Lerida, Spain, has declared that the last absolution, extreme unction, and Christian burial will be refused to any parishioner who allows himself or whose kindred allow him to be treated by any but duly qualified medical practitioners. All who are treated homeopathically will be deprived of the rites of the Roman Catholic Church, and be treated as Moors or Jews.

MATCH-MAKING.—AN old lady who has several unmarried daughters feeds them on fish diet because it is rich in phosphorus, and phosphorus is the essential thing in making matches.

THE AMERICAN PRACTITIONER.

MAY, 1881.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

INDICATIONS FOR THE USE OF THE FORCEPS.*

BY T. C. QUINN, M.D.

In considering the indications for the use of the obstetrical forceps, I shall confine my remarks principally to their use in lingering natural labor; and the first and most important question to be decided is, which will give the mother and child the greater prospect for life and health, the early use of the forceps or trusting to nature? Those who oppose the use of forceps in lingering labor claim that they are "an instrument of torture and danger, and should only be employed when the life of the mother or child is in imminent peril," for "labor is simply a normal physiological process," and we have no right to interfere unless nature is unable to accomplish her task. They argue that the forceps are very liable to lacerate the uterus, vagina, and perineum; rupture varicose veins; give rise to heart-clot; occasion pelvic abscesses, sloughing of the tissues, septicemia,

* Read before the Miami Medical Association at Loveland, Ohio, Nov. 8, 1880.

metritis, peritonitis, vesico-vaginal fistula; and may even tear asunder the joints and fracture the pelvic bones—accidents ending in death, or, worse, leave the woman a burden to herself and friends.

Playfair says, "Drs. Hicks and Philips have proved beyond a doubt that these evils are the product of lingering labor," and are attributed to the use of forceps; but says similar accidents may result from incautious use of the instruments, and thinks that slight lacerations of the mucous membrane are frequently produced from the "blade being introduced without due regard to the pelvic axis, or pushed forward with force and violence, or unsuitable instrument being employed, or undue haste and force being used in delivery."

Again they tell us that the forceps will depress and fracture the child's skull, and produce cerebral congestion and effusion. Playfair says, "These evils are of the rarest possible occurrence," and when they do happen "generally result from undue compression, improper instruments, or ill-directed traction. Many of the more common results, as slight abrasion or paralysis of the face, are transitory in their nature and of no real consequence."

In the Richmond and Louisville Medical Journal, 1871, there is a very able and convincing article on "Management of the Obstetrical Forceps," by Dr. Clark, of Oswego, N. Y. It abounds with practical knowledge and good sense, robs the forceps of many terrors, the dangers and fearful responsibility that accompany their use, which have been described in highly dramatic style by professors and obstetrical authors. He affirms that "the forceps are not in any material degree a dangerous instrument to the mother." He says, "I have seen some discreditable fooling and a little cruelty with forceps, but I have never seen a case in which there was reason to attribute any injury of the parturient to their employment. When skillfully used they are not only harmless, but painless. The forceps are indeed a peculiarly innocent instrument. With their curved form and round edges they are almost incapable of mischief. They can not cut, punc-

ture, tear, nor scrape; nor can they bruise the soft parts without the most stupid and reckless violence. As for their being pushed through the vaginal or uterine walls, it would be difficult or impossible. Injury to the bony parts of the pelvis is equally out of the question. I will not deny that if the operator, following the instructions of the books, endeavors obstinately to introduce the long double-curved forceps into the upper part of the pelvis, with their pelvic curve twisted from accordance with the anatomy of the passage thereto, he may bruise the parts; nor will I deny that a similar or even greater evil may result if he imitates Dr. Elliott and wantonly and absurdly uses such force as to break or bend a blade, endanger the integrity of his instrument, and lay out his whole strength with braced feet." He holds that "forceps are justifiable sometimes in order to relieve the anxieties of the patient and her friends, and even to save the time of the practitioner himself;" for he thinks that he "finds the application as easy as passing a catheter, and as innocent as giving an enema;" but says, "I shall not claim that this instrument is ordinarily as harmless to the child as it is to the mother. The features of the infant are in practice often temporarily and sometimes permanently disfigured by it, while the bones and even the viscera of the head have been in some instances fatally crushed. I do, however, claim that these injuries are entirely unnecessary. It is only when the grasp of the forceps is used for the purpose of compression or to avoid slipping that the instrument, when properly applied, can do any damage to the child's head."

Dr. Moore, of England, maintains that the old rule "not to resort to the forceps so long as the fetus makes any advancement is fraught with evil both to mother and child," and that their timely use in shortening the second stage of labor is the *great practical* improvement of recent midwifery. His statistics show that "the assisted cases get up and are about sooner and feel better than those left entirely to nature." He thinks we are justifiable in "using the forceps when the patient is very desponding or impatient, and to save time if the case is favorable, to relieve the woman and ourselves from work."

In the discussion which occurred at a meeting of the London Obstetrical Society in May, 1879, on the use of forceps and their alternatives in lingering labor, all agreed that "under almost all circumstances the forceps are preferable to their alternatives; that forceps may be not infrequently used with advantage when the head is in the pelvis and the os dilated, but that in proportion as the head is higher in the pelvis and the os undilated the necessity, utility, and safety of the forceps becomes less frequent." The opinion of almost all the speakers was in favor of a moderately frequent use of the forceps when "the head was in the pelvis or on the perineum."

Prof. Barker thinks all intelligent men will agree that the science of the present day has settled the point which decides the question that "in a large majority of cases of lingering labor it is safer for the mother and child to use the forceps than to trust to nature," for there is no danger in the use of the instrument where there is no such disproportion between the diameter of the fetal head and the pelvis as to make delivery impossible without injury to the maternal structure or dangerous compression of the fetal cranium," provided the operation is performed skillfully. He has for the last ten years used the forceps once in every twelve cases without any bad results following to either mother or child. Dr. Hardie, of England, used forceps on an average of once in every three or four cases in one hundred labors, just to relieve pain and anxiety, with the loss of but one woman, and she died from acute tuberculosis. All the children were born alive. Dr. Beatty used forceps in one hundred and five cases without any bad results. Dr. Hamilton, of Scotland, in using the forceps once in every eight cases lost one child in three hundred and seventeen. Then he used them once in every five cases in two thousand four hundred and sixty-seven labors, with the loss of but one child, and that was at high presentation. From the first of 1877 to the last of 1879 I used forceps once in every twenty-seven and one half cases, and every case of the forceps deliveries recovered very rapidly, and all the children were born alive. Dr. Clark used forceps once in every seven

hundred and forty-two cases; the perforator once in one hundred and forty-nine. Dr. Collins used forceps once in every six hundred and ninety-one cases and the perforator once in one hundred and forty-one. Churchill used forceps once in every five hundred and forty-six cases; the perforator once in every one hundred and forty-nine. Dr. Johnson used forceps once in every sixty cases; the perforator once in two hundred and eighty. Naegele used forceps once in every thirty-one cases; the perforator once in one thousand seven hundred and eleven. Siebold used forceps once in every seven cases; the perforator once in two thousand and ninety-three. Baker Brown reports one hundred cases of lesions following labor, of which ninety per cent were the results of lingering labor. Jobert reports one hundred and fifty cases of vesico-vaginal fistula. All were the results of lingering labor. Dr. Emmet reports two hundred and fifty cases of vesico-vaginal fistula. Three were the results of forceps, but they were cases of mal-practice. All the rest were the results of lingering labor. In his recent work he makes the following statement: "I do not hesitate to make the statement, I have never met a case of vesico-vaginal fistula which without doubt could be shown to have resulted from instrumental delivery. On the contrary, the entire weight of evidence is conclusive in proving that the injury is a consequence of delay in delivery."

Dr. Martin read a paper before the Boston Gynecological Society on "instrumental interference in labor as a cause of vesico-vaginal fistula," in which he takes strong exceptions to Dr. Emmet's statement. He says he never met with more than a dozen cases of the lesion, and two were produced directly and exclusively by "instrumental interference." The first was a dry birth, and had dragged on for twenty-four hours prior to the "application of the instrument." The patient was imperfectly etherized, and threw herself about on the bed during the operation, and it was "feared the forceps-blade had injured the vaginal walls;" but she made a good recovery, and nothing wrong was observed until three weeks after labor. On making an examina-

tion he discovered the cicatrix of a wound in the anterior vaginal wall, with a minute fistula. In the second case he says, "Means were resorted to to bring forward a slow labor at a rate much beyond necessity and the intention of nature. Again, the medical attendant did not consider it of much importance that the handles of his favorite forceps should be accurately and evenly locked, so that the blades are somehow fixed on the head, allowing any amount of traction to be applied." He saw this case a short time after labor and found a cicatrix and fistula in the same region as the first. It would appear very reasonable that the lesion in both cases originated from sloughing produced by long-continued pressure.

Playfair asserts that in the vast majority of cases the fistulous opening is the consequence of a slough resulting from inflammation produced by long-continued pressure of the vaginal walls between the child's head and the bony pelvis in cases in which the second stage has been allowed to go on too long; and in most of these cases the forceps are used and get the blame of the accident.

It is claimed by many of the profession that the forceps, when properly used, protect the perineum. Prof. Barker claims that they preserve the perineum more frequently than they rupture it. Dr. Clark says that the wedge-like form of the proximal end of the locked blades of the forceps is an important aid in dilatation, for they prepare the way. Dr. Mundé reports forty-four lacerations of the perineum, and only two occurred in forceps delivery.

The literature of pelvic fractures indicates that nearly all originate from external violence, and the reports of those originating from the use of forceps are very meager and few. Prof. Hamilton is exceedingly doubtful if a healthy bony pelvis can be separated by fracture under even somewhat violent and reckless management of forceps deliveries, but thinks if the bones are weakened by disease they might be fractured by the *judicious* use of forceps.

Sir James Simpson, Drs. Tyler Smith, Johnson, Sinclair, and

others have demonstrated beyond a doubt that the more frequently the forceps have been used in lingering labor the less the mortality becomes to both mother and child. All the standard authors of the present day justify the use of the forceps; in some cases in the first stage of labor, the head above the superior strait; but Dr. Isaac Taylor, of New York, has capped the climax, who for the last eighteen years has resorted to the use of forceps in the first stage of labor if the os does not relax or the head of the child does not adapt itself to the os, even if the pulse is good and there are no other unfavorable symptoms, only labor does not progress satisfactorily. He even uses them when the os is not dilated more than seven eighths of an inch, and has never seen any bad results follow.

The evidence is certainly sufficient to satisfy even a prejudiced mind that the early use of the forceps in lingering labor gives a much greater prospect to the mother and child for life and health than trusting to nature, and that it is not an instrument of torture and danger, but relieves suffering and saves lives. Yet many of the profession of today regard the use of the forceps with almost as much dread as the perforator, and advise waiting until the head has made no advance for four hours, or the patient's respiration becomes hurried, pulse quick, tongue dry, discharge foul, vagina hot and swollen, or delirium occurs. Some would probably wait, as Dr. Osborne recommends, until all the powers of nature are exhausted, all capacity for further exertion is at an end, and then use the forceps and lay the blame of all the evil results that followed to their use.

In the discussion which took place in the Medical Association of Highland County on the indications for the use of obstetrical forceps in labor Dr. Spees said, "I have attended between three and four thousand obstetrical cases, in only two or three of which the forceps were used, and have had no death in childbed." He thought there were occasionally cases of hemorrhage, exhaustion, or inertia where they might be used if there was no great rigidity of the soft parts, and all other safe means had been exhausted. Now what are the other safe means? I

know of nothing but time, and to my certain knowledge this is not always a safe means in lingering labor. In conclusion Dr. S. quoted Prof. Moorehead's brilliant advice to his class, "Gentlemen, when you are called to a case of obstetrics leave your forceps and your ergot at your office, for fear in your haste the devil may tempt you to kill the mother or child." Very pernicious advice to give to those about to begin the practice of medicine; and he certainly had but little confidence in the judgment and discretion of his class, and less in his own ability and skill as an instructor. He might with equal propriety have advised them to leave all other medicines and instruments in their office lest the devil should tempt them in their haste to kill their patient. A physician should be deliberate in judgment, cool in action, have a full appreciation of the responsibility resting upon him, and be ready at any time to resort to any reliable means when necessary. He should always go prepared for any emergency, especially in obstetrics. Such was the advice of my preceptor. He said, "When you are called to a case of obstetrics take chloroform, ergot, and lancet," and he should have added obstetrical forceps.

Dr. Russ thought the physician had little to do except to cut the cord and remove the placenta. He thought the forceps were rarely needed. He said we should ask ourselves if nature was sufficient for the expulsion of the child. If so, she should be allowed to do it. He would not use the forceps in natural cases of labor; no such cases needed any such interference; but when the life of the mother or child was in jeopardy he would use the instrument. If Dr. Russ, with his keen penetration, can foretell just how much pressure the mother's soft parts can bear without sloughing, with its often fatal results, or the child's head can bear without destroying life, it will answer for him to follow the old rule of our predecessors; but unfortunately we are not all gifted with his extraordinary penetration. He also said, "Some of the gentlemen have had considerable puerperal fever in their practice," and he would suggest that they might find a cause for it in the indiscriminate use of forceps. When any of the profes-

sion leave the old-time ruts made by their predecessors for newer and better ways, others are ready to cry them down as innovators and accuse them of want of discretion and prudence. Those who rarely or never use the forceps themselves are prone to attribute all possible evils to their use, and the doctor who employs the instrument is frequently, in their eyes, little better than a butcher. Why, the mere name of forceps arouses in their mind harrowing scenes of agony, fractured bones, septicemia, and death.

Dr. Blair was in favor of allowing plenty of time for the delivery of the woman, and in case the pains were ineffectual, and all other indications being favorable, he would give ergot. Dr. Thomas advised waiting, and thought that the forceps were used too indiscriminately by some physicians. Dr. Matthews had treated several hundred cases of midwifery, and had never used the forceps; but he would say that "if they would alleviate pain without danger to mother or child, use them; but when you are called in a case of this kind it is not worth while to be in a hurry." Dr. Patterson believed that "the use of forceps was beneficial in a considerable proportion of cases," yet he would not use them near so often as many physicians do. Dr. Granger said that he had succeeded in all his midwifery cases satisfactorily without the use of instruments, but believed there were many cases in which their use was demanded. Dr. Van Winkle had never used obstetrical forceps; had never had a case of labor the duration of which extended beyond twelve hours; yet he thought there were many cases in which the forceps might be used to advantage.

There are members of the medical profession today who are skilled and ready to resort to any reliable means to relieve pain and save life; but when they take the obstetrical forceps in their hand, lacerations, ruptures, fractured skulls, and God only knows what terrible evils rise before their imaginations; for the awful responsibility and direful results originating from the use of forceps have been delineated with such glowing eloquence that it has imprinted erroneous ideas so deeply on their minds that

nothing can eradicate them, and, added to this, "the obscure, complex, contradictory, and multiform rules" for forceps delivery causes them to doubt their memory, dexterity, and their ability to perform the operation without endangering the life of mother or child, or both. All agree that the forceps should be used if the life of mother or child is in danger. How is a physician to decide this question in lingering labor? How is he to tell the amount of pressure that can be borne without injury to the mother or child? We occasionally meet with cases apparently similar in every respect—the appearance and condition of the patient the same, the severity and duration of labor the same; yet in one serious results will follow to either mother or child, while in the other both will do well.

In the commencement of my practice I was called to an obstetrical case at 5 o'clock in the morning—primipara, aged nineteen, large and muscular, and had been in labor ten hours. Second stage commenced about noon. At 3 o'clock pains were vigorous, head high in the pelvis and making but little progress. I sent for a physician to meet me in counsel who had about twenty years' experience. When he learned the history of the case he said, "Wait until 10 o'clock tonight, and if labor is not completed use the forceps." He dosed her on pepper tea, steamed her over tansy tea, used plenty of lard and a great deal of patience, or rather impatience, until 9½ o'clock, when the child was born. Both mother and child did well.

About two weeks afterward I had another case similar to the first in nearly every respect. I had recourse to pepper tea, etc., but the child was still-born. Two months afterward I had another similar case, and followed the same treatment, and both mother and child did well. About a year afterward, in another like case, the same treatment was pursued and the child was still-born and the mother had a tedious convalescence.

In 1873 I attended an obstetrical case—primipara, aged twenty, very large and muscular. The second stage of labor lasted eight hours, and within three days the mother was attacked with septicemia, originating from sloughing; but the child did well.

I have attended two cases since where the second stage of labor lasted between four and five hours. Both children showed marked indications of congestion of the brain.

About five years ago I saw a case at 5 o'clock in the morning—primipara, aged twenty; had been in labor six hours. Second stage commenced about 7 o'clock. At 8 o'clock pains vigorous, head high in the pelvis and making but little advancement. The indications were that labor would last four or five hours. At 9 o'clock, while in a severe pain, and without the least warning, she was attacked with a fearful convulsion, and had three before I could obtain either forceps or counsel. I tried to push the head up and turn, but failed. The child was still-born, and the mother died in two or three hours after delivery.

Now how could I foretell that long-continued pressure would result in the death of the children in the second and fourth cases, in sloughing of the soft parts of the mother in the fifth case, in serious injury to the children in the sixth and seventh cases, or that the woman would be attacked with convulsions in the eighth case, destroying both mother and child? I am confident that had I resorted to the forceps early in all these cases I would have saved the lives of three children and in all probability the life of one woman. This experience is conclusive to my mind that the only safe remedy in lingering labor is the early use of the forceps. Is the structure of the uterus and pelvis of no value? Is the long-continued pressure on the child's head of no moment? If they are, we should resort to forceps in lingering labor to preserve the structure and prevent septicemia and inflammation. Do not understand me that I favor the use of forceps when the woman is doing well and gives proof that she is able to accomplish her task without injury to herself or child, but simply in those cases where we have reason to believe that labor will be lingering. Then we should resort to the forceps early, before any of those symptoms appear which are held to be essential indications for their use, and save the woman "long hours of torture, relieve the tissues of long-continued pressure," which is the starting point of many of those direful results which

follow labor, and spare the child's head of the often serious and fatal results due to the same cause.

Are we to stand by in lingering labor while the patient and her friends are crying "How long is this suffering to last?" and quiet our conscience with the belief that we are doing our duty because we are following in the beaten path of predecessors that "so long as the head advances and recedes" we have no right to interfere with nature? Such a plea is only a shield for bigotry and timidity, and is erroneous, needless, and barbarous; for we can and it is our duty to relieve her; and the advanced state of our art should prohibit a physician from allowing his patient to wrestle with her ineffectual pains. It is mockery, it is sinful for a physician in lingering labor to dose his patient hour after hour for appearance, and calmly tell her to make the most of her pains, making no effort to aid her, from prejudice or fear it will be called "meddlesome midwifery." We should stand upon broader and more independent ground, ever ready to receive facts which have been proved by experience and do our duty regardless of the croaks of fogies.

Again: The forceps should be employed in inertia, or if the pains are ineffectual in expelling the fetus in a reasonable time, instead of resorting to ergot or any drug of that class; for there is no more baneful doctrine inculcated than "that which favors the use of oxytocics before the second stage of labor is completed."

About four years since I attended an obstetrical case where the expulsive force was ineffectual in flexing the head. I tried to flex it with my hand, but failed; and having seen it stated that quinine would increase uterine contraction in a natural manner in inertia, and hoping thus to overcome the difficulty, I gave her five grains, and in three quarters of an hour a pain came on and lasted until the fetus was expelled. Flexion never took place, but the occipital bone was driven an inch under the parietal, causing the death of the child.

In regard to the use of the forceps in the first stage of labor, with the head above the superior strait, I am not prepared to

subscribe to the doctrine without more satisfactory proof that it is the safest and most judicious means of rendering aid. I have used the forceps once when the head was above the superior strait and the os fully dilated with success, but think it would have been wiser perhaps to perform version. My rule in a case of lingering labor originating from rigidity of the os is to insert two fingers in the os, in absence of pain, and keep it well dilated until the pain returns, then withdraw the fingers, and insert them again as soon as the pain ceases. In this way I have succeeded often in dilating a very rigid os in half an hour. Another very good remedy is atropia hypodermically. In two cases of hemorrhage from placenta previa I succeeded by using a tampon until the fetus engaged the bleeding surface. Both mothers and children did well. If I should meet with convulsions or exhaustion in the first stage of labor, the head above the superior strait, I would endeavor to dilate the os with my hand and turn.

In using the forceps I have always applied the blades in relation to the sides of the pelvis, although I was taught that they should be applied in relation to the sides of the head; and the same rule was given by all the obstetrical authors of that day. Bedford declares that "it is the position of the head that should determine the position of the blades." When I studied the rules given for the application of the forceps, varying for every change in the position of the fetal head, I found them so numerous that it was almost impossible to remember them, and their obscurity made them very difficult and doubtful if I understood them. The more I studied the more complex and obscure they seemed, and I learned that they were not scientific facts, for if so there would be simplicity and uniformity in their application. I asked my preceptor how he kept all the presentations and special rules for the application of the forceps in his memory. He answered, "Only permit the blades to have their way, and you will succeed;" which is nearer the truth than the old advice to apply them to the sides of the head.

A still greater obstacle to the use of forceps met me on the

very threshold of practice, for I found that it was impossible in some cases to ascertain the precise position of the head; and I occasionally meet with the same difficulty still. In consequence of these obscure and complex rules given for the application of the forceps, and the fear that I might inflict some or all of the direful evils on the mother or child which were attributed to their use, I had almost abandoned the idea of ever attempting their application, when I read an article on applying them in relation to the sides of the pelvis, and was struck with the rationality of the advice, for it removed the most of my perplexities. The first opportunity I followed this rule with success, and have continued so to apply them ever since.

Dr. Barnes says, "Do what we will and attempt as we may to pass the blades in relation to the child's head, they will find their way to the sides of the pelvis." Playfair says, "Of the perfect correctness of this observation I have no doubt; hence it is a needless element of complexity to endeavor to vary the position of the blades in each case, and one which only confuses the inexperienced practitioner and renders more difficult an operation which should be simplified as much as possible;" but also says that "it is of importance that the precise position of the head should be ascertained in order that we may have an intelligent notion of its progress." Doubtless it is well to ascertain the precise position of the head, but it is sometimes difficult or impossible, and, after all, not of great practical moment. Dr. Clark asks, "For what purpose is the pelvic curve given to the long forceps, unless it is to accommodate the shape of the instrument to the anatomy of the mother?" Again he says, "I assert that until the head is actually at the outlet of the pelvis it is substantially impossible to apply the forceps in any other manner than to the sides of the pelvis."

In making traction with obstetrical forceps, should it be direct or both "lateral and extractive force?" Miegs, Bedford, and all the popular authors of twenty years ago advise the latter. Bedford says, "The force employed for the purpose of delivering the child should be compound, consisting

of *two thirds lateral and one third extractive*." Of late writers Playfair says, "Besides direct traction, we may impart to the instrument a gentle waving motion from handle to handle which brings into operation its power as a lever." Dr. Duncan, on the other hand, says that the lateral motion of the forceps is not only useless, but injurious; for if "the forceps are made to compress the head so strongly as not to slip on it—which mode is probably regarded as desirable—then the point of the blade which is on the side of the head toward which the movement is given will exert a specially powerful and certainly undesirable amount of pressure on the parts of the child's head or face which they touch. If, on the other hand, the blades do not press the head with such firmness as to avoid a to-and-fro motion of them on the head, then the scalp will be liable to be much injured and its surface abraded—"conditions which are often observed as the results of this kind of proceeding;" while "it produces no evasion or diminution of the difficulty to be overcome."

Dr. Marcy, of Boston, believes that he has met with two or three cases where the vaginal walls were injured with forceps by lateral traction, and one "patient certainly lost her life from this cause." He "does not believe we gain any purchase-power from the movement, but rather lose." For a number of years he had given up the rotary motion and used direct traction. Dr. Clark thinks "it would hardly seem to admit of dispute that the extractive power of the forceps ought to be used in imitation of nature, and accordingly in the direction of the expulsive action of the uterus and abdominal muscles as modified by the lines of the pelvic passage." He says that "if our first efforts at moving the head along fail of success we may properly direct our subsequent tractions tentatively, a little this way and that, distrusting the correctness of our judgment as to the exact law of the case, and learn to aid aright the *vis a tergo*." This is certainly unnecessary, for if the handles of the forceps are held loosely in the hand when the uterine contraction commences they will indicate the direction in which the traction should be

made. Lateral traction for the purpose of gaining lever power is certainly useless and dangerous. The strength of any man is greater than can be applied with safety even in direct traction. Moreover, in endeavoring to assist nature we should imitate her. In labor the expulsive force of the uterine contraction pushes the fetus directly through the pelvic cavity; therefore the traction should be made direct, in conformity with the uterine efforts.

In conclusion, I wish to direct your attention to the subject of laceration of the female perineum during labor, as it does not receive the attention from the profession that its importance deserves. It has been proved by gynecologists that lacerations extending to the center of the perineum often result in serious consequences to the patient. It has been found that lacerations of the perineum are of frequent occurrence, even in the practice of the most intelligent and experienced obstetricians. In the Vienna Hospital there were recorded thirty-eight lacerations in six hundred and eighty-eight cases of primiparæ, and two in seven hundred and eighty cases of multiparæ, and they only record those which extend to the center of the perineum. Another hospital reports fifty-six lacerations in one hundred and nineteen cases; forty-seven were primiparæ. Dr. Mundé had forty-four lacerations in twelve hundred cases; thirty-eight were primiparæ. Snow Beck saw seventy-five large lacerations in one hundred and twelve cases; all were primiparæ.

There is no doubt that slight lacerations of the perineum (I mean "those which extend through the fourchette" and involve the perineum proper, "but do not reach farther than the sphincter ani muscle") occur more frequently in private practice than many are aware of or will admit. Education, modesty, and indifference have prevented physicians from making a thorough ocular examination of the perineum after labor. Dr. Mann asserted in 1874 that "as a rule with us the perineum is never exposed during labor, nor is it examined after labor to see if it has sustained any injury." The neglect of this important matter originated from the teaching of obstetrical authors never to expose the patient unless there was some very grave and urgent

necessity that demanded it, and that lacerations of the perineum seldom or never occurred except in instrumental deliveries or from *carelessness or want of skill* on the part of the attendant. Bedford says, "Nature is so conservative that under ordinary circumstances the exit of the head is effected without injury to the parts." And this opinion coincides with his teaching; for he describes very minutely how to support the perineum to prevent lacerations, how to remove the placenta, how to apply the bandage on the woman, how to place the napkin to the vulva, how to ascertain if the cord is around the child's neck, how to wash and dress the child, how to examine it for deformity, etc., but not one word in regard to examining the perineum after labor to ascertain if it has sustained any injury. It is very probable that few, until within a very recent period, made any thing but a digital examination; and it is impossible to ascertain with any certainty in regard to laceration of the perineum except by an ocular examination.

In the discussion which took place in the Medical Association of Highland County, previously referred to, Dr. Spees said he had had but one laceration of the perineum in three thousand or four thousand obstetrical cases, and that, he asserted, was the product of the forceps. He said, "The forceps are too indiscriminately used, and the results are too often rupture of the perineum." Dr. Matthews had "never had a case of ruptured perineum; knew he had not, from the fact that *he was there*." He thought that the perineum was not as tender an organ as some of the younger brethren were led to believe, and he was convinced that statistics greatly exaggerated the number of ruptures. Dr. Van Winkle was "sure he never attended a case in which the perineum was ruptured." Drs. Russ, Thomas, Blair, and Granger I believe had never met with a lacerated perineum.

While the New Vienna physicians had met with slight lacerations frequently in primiparæ, how are we to account for this great discrepancy? Are the perineums in Hillsboro and vicinity more elastic and less liable to laceration, or do the physicians support them more judiciously than they do in Vienna and other

places and prevent its occurrence? If so, what is their mode of procedure? for there are at least fifty methods given, and every physician who rarely or never meets with a ruptured perineum swears by a special method. Dr. Mossman, of Greenville, Pa., claims that a rupture of the perineum should not occur. He says, "I do positively state without hesitation that it should not be the case with a careful and intelligent obstetrician." Again he says, "Without doubt instruments are the most common cause of the injury, excepting in cases where there is no attendant present at the time of delivery. The cases are very rare and the circumstances extraordinary in character when it can be truly said to be accidental. Very broad assertions, and if true we have but few careful and intelligent obstetricians. His method is to lubricate "the external parts and the vagina as far as the finger will go" with an ointment composed of lard and belladonna. He says, "Then I wait for the first stage of labor to end. If it occupies one or two hours I make two or three applications of the ointment. As soon as the womb has dilated sufficiently to satisfy me that the cervix is safe against laceration I begin at once artificial manual dilation of the perineum. The ointment is applied freely. One or two fingers are placed within the vagina, and pressure made forward and downward. As soon as extension forces the head strongly against the perineum, remove the fingers from the vagina and introduce two of them into the rectum; place the thumb against the occiput. When pain comes on, pull the perineum upward and over the presenting head, and at the same time bear upon the head to direct it upward and under the pubes as it escapes from the vulva. When the pain ceases and the head recedes, place the two fingers again in the vagina" as before, and so on until the head is born. He further says, "I will state that it has never yet failed to carry me through in uncomplicated labor in normal primiparæ, without so much as even rending the mucous membrane covering the inner sides of the fourchette." Brilliant results. He said that Dr. Mundé suggested rubber bags and dilators, and he "believed that they could be advantageously used." Dilating the vagina

with rubber bags, dilators, and fingers would do well enough if we could foretell when such measures would really be required; but are we in every case of labor to blow up with rubber bags, pry open with dilators or the fingers the woman's vagina for one or two hours, for fear that the perineum might be ruptured, when we can not foretell the danger until a very short time before the head passes the vulva, and not always then? Now "if the vulva be so narrow [which is often the case] that the head can not pass without lacerating" the perineum, it will lacerate in spite of Dr. Mossman's lard, belladonna, fingers, and all.

During the first few years of my practice I thought that it would be almost sacrilege to make an ocular examination of the perineum after labor unless there was something more grave than slight wounds, depending entirely on a digital examination of the perineum, taking but little care in doing that; for I believed, like Dr. Matthews, that they were not very tender, for I had never met with a lacerated perineum; at least I thought so. Four or five years ago I met with a large laceration, and have been more careful in making my examinations since; and for some time if I have the least reason to believe that there is even the slightest tear I make a thorough ocular examination, and now meet with a large per cent of slight lacerations in primiparæ and a few in multiparæ.

I have met with two lacerations extending through the sphincter ani muscle. The first was not operated on, and never united; but she had perfect control over the bowels, and informed me that it had never caused her the least inconvenience. The second case was operated on immediately, and recovered. Within the last year I have attended three obstetrical cases where the perineum had been lacerated in previous labors. Two extended to the center of the perineum, and the third to the sphincter ani muscle. These women made no complaint, supposing their condition was but the natural result of labor.

I have tried all the methods of supporting the perineum that appeared to me rational, and some have seemed to succeed best in one case and some in another; but all have failed me. The

plan of keeping the patient on her side when the head is distending the perineum is of great assistance in all, as the perineum is relieved of the weight of the child's head, and the expulsive force is not so direct.

It appears that some perineums are so tough and elastic that they will stretch as thin as paper, and the hair of the child's head can be felt through them; and yet they rarely or never tear. I never met with a laceration in a case of this character. It is the thick and soft perineum that is the most liable to be ruptured. It seems to have no elasticity or resisting power, and if the head descends very rapidly with strong expulsive force it is driven right through the perineum, often in defiance of all efforts to prevent it.

At all events lacerations are very common; and although, as Dr. Garrigues says, we "can do a great deal to avoid them, *a certain number are unavoidable*; so that the occurrence of this untoward accident is by no means in itself a proof of want of skill or care on" the physician's part, Dr. Mossman to the contrary notwithstanding. Then we should not try to conceal the fact, but make a thorough ocular examination; and if the injury is sufficient to require treatment, operate immediately.

Dr. Thomas says that "ruptures furnish one of the most fruitful sources for the absorption of septic elements; and I do not hesitate to say that thousands of women suffer throughout their lives from uterine displacements, engorgements, and vesical and rectal prolapse in consequence of injuries inflicted upon it during the parturient act." If this statement is true (of which there is not the least doubt), every physician can see the propriety of operating immediately to ward off septicemia (for if the torn surfaces are brought in contact the healing process will seal them in twenty-four hours so they will not absorb septic matter) and prevent the uterine troubles mentioned as the ulterior consequence of the accident; while the patient will submit more readily to the operation at this time; indeed, if the sphincter ani muscle is not involved, few will ever allow an operation to be performed afterward.

But suppose that the opinions held by some are true, that so long as the laceration "does not involve the sphincter ani muscle" it is of little moment, for the patient suffers no inconvenience from it. Then we should operate to preserve domestic felicity, if for no other purpose. Hundreds of divorces are applied for annually, while discord and contention reign in many a household, all originating either directly or indirectly from this cause. The man not enjoying sexual gratification at home, either leaves his wife or goes elsewhere, which naturally gives rise to jealousy, contention, separation, and finally divorce.

NEW VIENNA, O.

FOREIGN CORRESPONDENCE.

My Dear Yandell:

LONDON, April 15, 1881.

We are at last beginning to flatter ourselves that we have emerged from the long and dreary winter, though the piercing blasts from the northeast and the frosts at night warn us we must not allow the bright sunshine to raise our hopes too high. Only a few days back we had a heavy fall of snow, and though it melted as soon as it fell, its effect was most depressing. I have just returned from a short stay in the south of England, whither I always go at this, to me, the most charming season in the whole year, when the country is "lovely with the first burst of spring." Primroses and violets are every where in profusion, while the swelling buds are on the point of breaking into leaf. It is worth while to live the whole year through in this vast wilderness of bricks and mortar only to feel the intense pleasure that the sight of green fields, woods, and wild flowers can bring one; an honest enthusiasm, by the way, that has nothing in it akin to the raptures of esthetic maniacs.

Although the Guy's Hospital "difficulty" has been tided over, the flame of dissatisfaction enkindled by it among the medical

profession is by no means extinguished. However, the outrageous treatment of the medical staff by the governors will have been of distinct advantage if it serves, as seems likely, to call general attention to the management not only of Guy's but of all hospitals. The other day a meeting of the Metropolitan Counties Branch of the Medical Association was held under the presidency of Dr. Habershon, late senior physician to Guy's, and was attended by a very large number of distinguished hospital physicians and surgeons, as well as several of the laity interested in the question. The object of the meeting was to hear a paper by Mr. Timothy Holmes, F.R.C.S., on Hospital Management, and to consider particularly the relations of the medical staff to the lay governing body of hospitals. As might be expected from one who has for years made this subject a special study, Mr. Holmes's address was very able and interesting, and pointed out clearly the need of reform in many directions. He specially alluded to the muddled finances of the large endowed hospitals, as shown by the late crisis at St. Thomas.

This hospital has an ample endowment, had received an enormous sum by the sale of its previous site, and had for years been working with a diminished establishment. Nevertheless, it has become necessary to close a number of wards lately built, and to reserve others for the exclusive use of "paying" patients. It is feared that administration expenses have had a large share in producing this catastrophe, whereas these ought to be kept within the narrowest limits, so that the public might have a guarantee that every penny was expended in the relief of the sick poor. He concluded by moving "that it is essential for the proper management of any hospital that the medical staff should be efficiently represented in its government." To so obvious a necessity as this it may be thought no objection could possibly be raised. But such, unhappily, is not the case. Lay governors of hospitals are always ready to resist the slightest assumption of authority on the part of the medical staff, and in the older hospitals until lately the staff have been excluded altogether from the management. A royal commission will no

doubt do great good in the matter, and it is to be hoped that the parliamentary session now going by may not be allowed to pass without the appointment of one. Indeed it seems to us that a central authority will have to be organized to regulate to a certain extent the management of every hospital and to check the abuses which must from time to time appear every where

Both public and professional interest has been greatly excited during the last few days by the grave illness of the ex-Premier, Lord Beaconsfield. So far as I have been able to ascertain the facts of the case, I learn that his lordship has been suffering from a severe attack of bronchial asthma associated with undeveloped gout. This is not the first though it is the most severe attack of the kind from which his lordship has suffered. For some few weeks he had been ailing, but his indefatigable attention to public business led him to think less of his health than he ought to have done; and it is stated that being present on the night of the Candabar debate in the House of Lords, he was obliged to have recourse to relief from an antispasmodic before he addressed the house. After a few days, his lordship's symptoms became aggravated, and the attacks of spasmodic breathing were so distressing and the exhaustion so great as to cause the greatest alarm for the immediate consequences. Last Tuesday Her Majesty, participating in the general anxiety, desired that further advice should be obtained, and Dr. Quain was invited in consultation with Dr. Kidd, who has for the last three years attended Lord Beaconsfield in similar attacks. To this request Dr. Quain declined with regret to accede, being under the impression, like every one else, that Dr. Kidd was a homeopath. Being, however, positively assured that Lord Beaconsfield was not being treated homeopathically, he sought the advice of some of the most experienced fellows of the College of Physicians, who were decidedly of opinion that under the circumstances Dr. Quain would not be justified in persisting in his refusal. But the universal question is, "What, then, is Dr. Kidd?" He is neither a member nor licentiate of the College of Physicians, but he is an M.D. of Aberdeen, while as to his public appointments the

Medical Directory is silent. It is, however, understood that he is the chief support of the Homeopathic School of Medicine, being a lecturer there and dean of its school. Therefore, professing homeopathy, how comes he to be practicing allopathy? His convictions must be strangely elastic if he thus gives his patients their choice of the two methods of treatment. Still, with Dr. Quain at the helm, let us hope all will yet turn out well, and that the life of this, one of the greatest of modern statesmen, may yet be spared. The interest excited among all classes by his lamented illness is extraordinary. Having to pass through Curgon Street the other day, I found the pavement completely blocked by a dense crowd, while a long file of carriages filled the roadway, bringing those who wished to make inquiries and inscribe their names in the visitors' book.

I have, I think, in my last letters spoken of the awakening interest of surgeons in the operative treatment of injuries or diseases of the nervous system. I mentioned also a case of locomotor ataxy under the care of Dr. Bastian, in which stretching of the sciatic nerve had been performed by Mr. Marshall. I am happy to be able to tell you that the operation has been followed by so great a diminution of pain and discomfort, and so decided an improvement in motor power, that at the patient's earnest request the operation has been repeated on the nerve of the opposite side. From many hospitals now come reports of cases of locomotor ataxy treated by nerve-stretching, and the profession will wait anxiously for notes of these cases to be published *in extenso*. Another point now every where receiving attention is the restitution of function in nerves which have been severed by injury. At St. Thomas's Hospital Mr. McCormac sutured the two ends of an ulnar nerve that had been divided several months, and the restoration of function has been most remarkable. While in my own hospital—St. Mary's—Mr. Page and Mr. Pepper have had several cases of recent wounds in which they have, after securing the wounded vessels, sutured the divided nerves, and the patient has recovered with little if any loss of function from lesion. The exact space of time

during which the function of a divided nerve may be restored by suturing is yet to be determined. But it appears to be settled that after a time—certainly after a few years—the fibers undergo complete atrophy, so that the bringing the cut ends together will, even if union occur, not be followed by restoration of sensory or motor function.

Important medical events now taking place are the “Croonian” and “Gulstonian” lectures—both delivered before the College of Physicians. Dr. Moxon, the Croonian lecturer, has chosen as his subject, *The Influence of the Circulation on the Nervous System*, while the Gulstonian lectures are given by Dr. Coupland on *Anemia*. Both subjects are eminently interesting, the latter especially having lately received great attention and been much written on, particularly as regards “idiopathic” or “pernicious” anemia.

Addison appears to have been the first to call attention to this as a distinct disease, and since then observations on it have been recorded from time to time, but only comparatively lately has the subject been carefully worked at. The condition of the blood itself is of course the striking feature, and about this very different views are taken. Some maintain that the number of white corpuscles are diminished, others that they are increased. But as to the remarkably diminished number of red corpuscles there is no doubt—as I have myself noted in several cases—and the loss of their circular appearance is also well established.

Mrs. Ernest Hart, the wife of the well-known and brilliant editor of the *British Medical Journal*, informs me that the results obtained in estimating the hemoglobin in the corpuscles in cases of “idiopathic anemia” are even more startling than the diminished number and altered shape of the corpuscular elements, and she thinks that further study in this direction will throw light on the proper treatment of the disease. Mrs. Hart has herself done excellent work on this subject, and has published a most interesting pamphlet recording her own researches, which are most valuable. Dr. Coupland has called attention to many clinical points of importance in this disease, and there are

none more so than the so-called anemic fever. This fever, which is often considerable, the lecturer is inclined to attribute to the heat produced by the increased decay of the tissue-elements. At present Dr. Coupland has not mentioned the treatment of this disease.

My own teacher, Dr. Broadbent, used to say that the only remedy of any avail was arsenic, and certainly in his hands its effects were most marvelous. Beginning cautiously with small doses the patient may be brought gradually to take pretty large doses of Fowler's solution with immense benefit to his general condition. Iron was found to be of no avail, and indeed in some cases it seemed to do positive harm.

I have been much struck by a note in the *Pharmaceutical Journal* wherein Mr. Fairthorne recommends a new way of taking cod-liver oil. He suggests that two drams of tomato or walnut catsup be added to each ounce of the oil, the mixture being well shaken before taken. An ordinary emulsion of cod-liver oil is, as he very truly says, like eating codfish or lobster with a dressing of sugar and gum. He has found the catsup and cod-liver oil to agree with many persons much better than any other form in which cod-liver oil has been taken, and this he attributes to the association of substances generally employed as additions to food bringing into operation those digestive faculties of the stomach which might otherwise remain dormant when such incongruous articles as sugar and one of the principal ingredients of fish are introduced together. Possibly the action of different adjuncts to food on the nervous system, and through it on the digestion, may deserve more attention than is generally devoted to the subject. Another method of taking the oil suggested by Mr. Fairthorne strikes me as less nice. Half an ounce of Liebig's extract of beef is dissolved in two ounces of water; to this one ounce of vinegar and five ounces of cod-liver oil are to be added, and the whole is shaken up with half a dram of extract of celery seed. It strikes me that a good deal may be done in the way of administering nauseous drugs in connection with articles of food. Perhaps later Mr. Fairthorne will

suggest some such plan for administering the filthy oil of copaiba and the little less nauseous oil of sandal wood. By the way, I was much amused with a hospital out-patient the other day. He complained that a mixture I had given him containing emulsified oil of copaiba made him sick. He had been ordered a dose of the mixture three times a day, but being a coal-heaver and unable to carry his bottle about with him he had before beginning his work in the morning taken his full three doses all at once!

We are all delighted, my dear Yandell, to learn that you are coming over to spend the summer with us. Come right away.

PROCEEDINGS OF SOCIETIES.

KENTUCKY STATE MEDICAL SOCIETY.

This Society convened at Covington on Tuesday, April 5th, Dr. L. B. Todd, of Lexington, in the chair. The address of welcome, on behalf of the profession of Covington and Newport, was made by Dr. C. H. Thomas, of Covington. The reports of the various officers of the Society were now read, and after which Dr. G. L. Dunlap, of Danville, presented a paper on the Improvements in Surgery, which will appear in the June number of this journal. Dr. C. H. Thomas, of Covington, chairman of the Committee on Improvements in the Practice of Medicine, next reported. Dr. Thomas referred to the germ theories in relation to acute infectious diseases, in which class it is becoming more and more common to place pneumonia. This disease he believes to be entirely independent of a malarial cause, as proved by the geographical limits which the disease recognizes as well as the season of the year at which it prevails. He advocated the expectant plan of treatment in mild cases, admitting something,

however, for the recently-claimed specific action of quinine. In severe cases he recognizes the chief dangers as arising from the accidents incident to a high temperature, and therefore relies upon antipyretics of every kind included by the term. Notwithstanding the cause of acute rheumatism has for the last decade been recognized as consisting essentially in an overaccumulation in the blood of the acids normally excreted by the kidneys, either from overproduction or decreased elimination, the theory of its acute infectious character is gaining ground and has recently been reinforced by the discovery by Professor Virchow of micrococci in the blood of such patients. The skepticism prevailing in medical ranks he regards as wholesome, and especially so in its application to the cause of tuberculosis. He regards this affection as an infectious disease, and claims that the point of infection has been shown to be the point of inoculation from which the disease spreads throughout the entire system. He refers to the assertion that it has been demonstrated that the disease may be transmitted through the medium of the flesh of infected animals. If it be determined that the infection can be transmitted also by means of the milk of infected cattle, it will, however much it may please the investigator, open up a melancholy field for reflection.

Dr. S. M. Letcher, of Henderson, Ky., Committee on Hygiene, next reported. He declared for the necessity of the authority of law, and the appropriation of means to secure any satisfactory results, pointed out the errors in the present sanitary regulations, and referred to the position which the profession occupies toward the public as teacher in these matters. His report though long was interesting and instructive, and if its recommendations are seconded by the profession throughout the State much good will follow.

The president, Dr. Todd, delivered his address in the evening. He invited the attention of the Society to a brief retrospect of the work done in medicine in the past quarter of a century, and the lesson it teaches. This portion of his address was very interesting. He then referred in graceful terms to some of the

great names which have given renown to Kentucky medicine, among them Dudley, Lowry, Bradford, Bruce, Rogers, Jackson, and Yandell, and closed by an eloquent tribute to the late Dr. Cowling.

Wednesday morning the Society passed suitable resolutions on the death of Dr. Cowling. The scene was a solemn one, for no member of the Society was so uniformly liked as Dr. C. The resolutions were spread upon the minutes and properly engrossed for transmission to the family of the dead surgeon.

Dr. Letcher, of Henderson, chairman of the Committee on Revision of the Constitution and By-laws, made a report which, after a few verbal changes, was unanimously adopted. The only new matters of interest relate to a prize-essay fund, which was created; to making the city of Louisville the permanent place of meeting, and the first Wednesday in April the time, while the annual dues were made \$2.00 instead of \$3.00, as heretofore.

The recent action of the Bellevue Hospital Medical College and the College of Physicians and Surgeons of New York, in withdrawing from the Medical College Association, led to the following resolution by Dr. Dudley S. Reynolds, and its unanimous adoption:

"It is the judgment of the Kentucky Medical Society that the American Medical College Association should be encouraged in the attempt it has been making to institute reforms in the methods of medical teaching, and we pledge it our hearty support."

An amendment to the present law regulating the practice of medicine in this State, to be recommended to the next legislature, was offered by Dr. McCormick, of Bowling Green, and passed, as was a similar one applying to the qualifications of druggists and pharmacists throughout the State.

Dr. J. W. Holland, of Louisville, read a paper on the subject of chronic poisoning by the use of cosmetics. Dr. Holland maintained that there are, in nearly all individuals subjected to the action of lead, manifestations of sufficient importance to direct the mind in the channel of the cause long before the more marked

symptoms of wrist-drop and lead-line are manifested. In support of this view he detailed the case of a young woman who began using the preparation known as flake-white two years before she came under observation. Her history since has formed an interesting sketch of vertigo, headache, constipation, and recurrent attacks of colic; and a short time since she suffered an attack of melancholic mania which lasted a month. The characteristic symptoms of wrist-drop and lead-line were abruptly manifested, and previous to their occurrence she had not suspected the cause of her illness. Her case had baffled the skill of many of the ablest practitioners, and had been peculiar in this, that confinement to the house had led to considerable improvement. Under these circumstances the cosmetic had not been applied, and the system to some extent freed itself from the toxic agent. This woman's sister, a seamstress, who began using the same preparation at the same time, had lately been compelled to forego her labor because of increasing failure in the strength of her arms. She had suffered from the lead-gout, as it is called, and about a year before she came under observation she had an attack of what was considered by her attending physicians to be epileptic convulsions. Dr. Holland dwelt upon the two points to which it was the object of his paper to call attention, viz. first, that lead may be introduced into the system through the skin when applied in the form of beautifying powders, enamel lotions, hair restorers, etc.; and secondly, that all or nearly all such preparations contain lead in some form. He then mentioned some of the tests by which the presence of lead in such compounds may be detected.

Dr. Wm. H. Wathen, of Louisville, confirmed the views of Dr. Holland by detailing a similar case occurring in his own practice.

Dr. M. T. Scott, of Lexington, Committee on The Diagnosis of Diseases of the Chest, gave instead a carefully-prepared report of a case of aneurism of the thoracic aorta attended by no pronounced physical signs. The patient was a brickmason forty-seven years of age, possessing a syphilitic history, and had com-

plained of ill-defined symptoms referable to the abdominal and thoracic organs for twelve or fifteen months. His chief complaint was of dyspnea, not increased by muscular exertion, and apparently not excessive at any time, along with nocturnal pain of a dull, boring, neuralgic character, located between the spinal column and the left scapula. Physical examination revealed nothing characteristic except emphysema, and even this was not plainly marked—no bruit, no murmur, no thrill. In view of the syphilitic history, he was supposed to be suffering from some obscure form of tertiary manifestation, and was given potassi iodidi in scruple doses three times per day. Under this treatment he improved for a time, but only to relapse, and finally to die in a paroxysm of coughing. The autopsy revealed an aneurism of the thoracic aorta in the upper portion as large as an orange. It consisted in a dilatation of all the coats of the vessel, and was equally enlarged in all directions from the axis of the artery. It began abruptly, the normal caliber of the vessel extending quite up to the proximal as well as the distal extremity of the sac. The dull, boring pain was accounted for by the eroded fourth, fifth, sixth, and seventh dorsal vertebræ, which had been absorbed much more than the cartilages, giving the spine a serrated character. Dr. Scott then cited statistics showing the relative frequency of aneurism of different portions of the aorta, and then detailed several intra-thoracic conditions that may operate to change the diameters of intra-thoracic vessels, leading to a suspicion of aneurism by causing bruit and murmurs, and rendering any diagnosis based on purely physical signs uncertain. In summing up he concluded that after all it is upon the rational explanation of indirect symptoms that we must rely; in other words, that the sequential phenomena are of more importance than the physical signs in doubtful or obscure cases.

Dr. Ap. Morgan Vance, of Louisville, then read a description of a substitute for the plaster jacket in the treatment of antero-posterior and lateral curvature of the spine, and exhibited a number of well-made jackets. The apparatus consists in a

jacket made over a plaster cast of the patient's body, and constructed out of paper, glue, and steel stays, so combined as to form a dressing that accurately fits the body, admits of removal and reapplication, made pervious by ventilation holes, and much lighter and quite as unyielding as the plaster. These, along with the ease and cheapness of its construction, are the advantages Dr. Vance claimed for the paper jacket. He concluded by reporting two cases of spinal curvature cured by this method.

Dr. W. W. Dawson, of Cincinnati, said that while he had no doubt the future would give us the ideal dressing for these cases it was his opinion that it had not yet been invented. He disliked to hear it claimed as an advantage for any dressing for antero-posterior curvature that it had the advantage of greater correction of the deformity. He expressed himself as having been satisfied in the treatment of such cases if he could succeed in arresting, locking the disease at the point presented by the case when it came under observation. He had never been able to feel that he was justified in any attempt to overcome an existing deformity, and he regarded it as dangerous practice to make any such attempt. He thought the dressing might be useful in the lateral curvature of the spine, which consists in a mere want of equilibrium of the muscles, and is nothing akin to Pott's disease. But as applicable to Pott's disease he thought it still lacked the combination of elasticity to allow freedom and ease of movement and unyielding support—a combination difficult to be made.

Dr. W. O. Roberts, of Louisville, said that after a considerable experience in the use of various dressings for the relief of Pott's disease he had been met with most success when using the plaster jacket in the primary stages of the affection, while the bones were in the condition of a recent fracture, and following this in the later stages, when the fracture might be said to have united, by an apparatus similar to the one on exhibition. Used with this end in view, he regarded it as exceedingly useful. It seemed to him that the true aim of the surgeon in all cases of antero-posterior curvature was to secure rest and support to the

diseased structures—rest by fixing the parts as rigidly as possible, support by relieving them of all superincumbent weight. Hence he preferred the plaster in the earlier stages of the affection because it was inelastic, and the paper in the later stages because of its elasticity and convenience of application—after being once made.

Dr. D. W. Yandell remarked that he was pleased to see the manner in which the views of his friend Dr. Dawson had been received by the Society. It led him to infer that the members shared the opinions of this very experienced and very practical surgeon. Some years back, when the plaster jacket was first brought into notice by its eminent originator, it was for a while somewhat hazardous to question either its universal applicability or its uniform efficiency in spinal curvatures. Dr. Sayre claimed that the jacket absolutely corrected the deformity in certain cases, while the more enthusiastic of his followers soon began to assert that it did so in the majority of cases. Unfortunately time, with the additional experience which it brought, did not confirm the claims of the enthusiasts. It seldom does. The large majority of the practical surgeons of today would subscribe to the views just expressed by Dr. Dawson rather than to those which came into vogue along with the jacket itself. Yet he believed there were very few surgeons who would deny that Dr. Sayre had made in the plaster jacket an appliance of inestimable value in the treatment of spinal curvature—one which can not be dispensed with, at least until the ideal dressing looked for by Dr. Dawson is given us by the future. He had applied a jacket of some kind in nearly a hundred cases, and it did good in all. The amount of good naturally varied in different cases. In some it was immediate and striking; in others it came more slowly and was less marked. But the good was unmistakable in all. In not one, however, did the dressing prove capable of correcting such deformity, of righting such curvature as existed at the time of its application. *That*, whether slight or much, remained. He was glad to hear a surgeon of Dr. Dawson's experience express himself so positively on this

point. He (Dr. Y.) was satisfied, abundantly satisfied, if he succeeded in locking the deformity at the point he found it, in preventing its increase, in arresting further change. He aimed at nothing more. He expected nothing more, he promised nothing more. Nor in looking back over his cases had he ever realized any thing beyond this. He liked no more than Dr. Dawson to hear it claimed that any spinal jacket yet devised for antero-posterior curvature was capable of correcting the deformity. He had seen Dr. Sayre apply the plaster and Mr. Wm. Adams apply the poro-felt, and he had used these and jackets of many other materials, including those very light and very useful jackets just exhibited by his former pupil and assistant, Dr. Vance; but he had yet to see an antero-posterior crook of the spine straightened in any proper sense of that word. He fully agreed with Dr. Dawson that it was dangerous to make any attempt to correct a curvature. He was sure he had seen one child with marked curvature where nature, aided by good sense, had carried on the work of solidification in and around the diseased structures until the child was restored about as such unfortunates usually are. In an evil hour the parents were persuaded to allow a man who made what he called a spinal brace—a very costly and very cumbrous piece of mechanism—to undertake to straighten the curvature, which he declared his ability to do. Whether he made any impression on the deformity or not, Dr. Y. said he could never learn; but in quite a short time after the maker of the instrument applied it and began the straightening process the disease was rekindled in the vertebræ, the child was seized with the fever of suppuration, and between it and the attendant sweats and diarrhea soon ran down, until one morning while taking her bath she died suddenly of exhaustion. Dr. Y. referred to a second case of much the same character. He also expressed himself as agreeing with Dr. Roberts touching what should be the aim of the surgeon in these cases—to secure rest to the inflamed vertebræ and remove from them every ounce of pressure which it was possible to remove. He thought it of the first importance to keep these ends

in view, and that of all means at our command none compassed them altogether so fully and certainly, none at so little cost of time and trouble and money as the plaster. He made much use of the paper jacket, but was persuaded that its true place in antero-posterior curvature had been indicated by Dr. Roberts. Used at that period it was of great actual value, besides being convenient beyond any apparatus yet devised. But it was in the lateral curvatures that the paper jacket found its widest field—a field in which he thought no one who had seen it used would question either its applicability or general adaptability. In these curvatures it afforded the requisite support, restored the spine to its true line, and admitted of easy removal for purposes of cleanliness, frictions, massage, and gymnastics. Nor is it alone in spinal cases that the paper apparatus is of value. He (Dr. Y.) often used it in fractures of the lower extremities after the work of consolidation had been partially accomplished—as a kind of second dressing—more particularly in fleshy and unwieldy people. He was also very partial to it as an auxiliary means for straightening limbs in those deformities which result sometimes from synovitis and at others from muscular contractions, the dressing admitting, as in lateral curvature, of the necessary massage, etc. He frequently used it as a dressing in clubfoot, both in those cases treated by mechanical means alone and those in which he had practiced tenotomy.

Dr. John D. Neet, of Versailles, read an interesting account of a case of pyo-thorax, which presented some novel and somewhat unique characteristics. The patient was a man whose illness dated from an attack of diphtheria in the eleventh year of his age. There was no history of tuberculosis in his family, yet he suffered from so many symptoms common to that diathesis that his attending physicians sent him to Colorado with the hope of improving his condition. Instead, however, he grew rapidly worse, and was compelled to return home. A small tumor made its appearance on the right side which increased and decreased synchronously with the movements of the chest. In the course of time this grew red and inflamed and finally broke

down, leaving an opening through the chest-wall from which enormous quantities of pus were discharged. This opening was supplemented by others which increased in size until finally the individual died of exhaustion. His temperature had been normal throughout the entire history of his case; his appetite had been excellent, and on these grounds Dr. Neet felt justified in pronouncing upon the non-tuberculous character of the case. The autopsy revealed none of the lesions of tubercle nor of fibroid phthisis. The lung was compressed against the spinal column, and bands of pleural adhesions stretched in various directions across the cavity.

Dr. James T. Whittaker, of Cincinnati, in discussing the case said he believed the disease was essentially tuberculous in character, and belonged to that class of cases known as *empyema necessitatis*. He called attention to the fact that tuberculosis is a disease primarily of the blood, and as such more frequently acquired than inherited. He therefore attached no importance to the absence of a tuberculous history. He accounted for the condition of the patient prior to the destruction of the chest-wall on the ground that pus had not yet been formed; he emphasized the point that pus is produced by the white-blood corpuscle, but before it formed pus it must undergo a process of death; he explained the obscure points in the case, and claimed it as one of those cases presenting peculiar symptoms and following an independent course, yet dependent for its existence upon a common underlying condition.

Dr. J. M. Harwood, of Shelbyville, reported on the therapeutic uses of quinine, in which he expressed the belief that in many cases of remittent and intermittent fever characterized by a short apyrexia the administration of twenty grains of quinine per day is followed by such a rise in the temperature as frequently leads to the apprehension of a relapse by persons not intimately acquainted with the action of the drug. The greater part of his paper, which was short and concise, was devoted to the elaboration of this one particular point. The paper will appear in the AMERICAN PRACTITIONER.

Dr. R. M. Dunlap, of Danville, read a report on the epidemic and contagious diseases of the State within the year. From the report it appears that beyond the measles and a few cases of scarlet fever but little has been observed in this particular direction.

Dr. Edward Alcorn, of Hustonville, reported on uterine sub-involution, its pathology and treatment.

Dr. L. S. McMurtry, of Danville, read an exhaustive essay on the subject of the treatment of typhoid fever, or rather on the treatment of its complications and untoward symptoms.

Dr. W. O. Roberts, of Louisville, reported an ovariectomy, exhibiting the tumor, the important feature in the case being the quick recovery without a perceptible rise in the temperature after the operation, which was strictly Listerian. The patient was to all intent well in two weeks after the tumor was removed.

In the absence of Dr. M. F. Coomes, of Louisville, his report was read. It consisted of a description of an instrument which he called an audiometer—an improvement upon the instrument presented to the Society last year at Lexington. It is claimed that by its use malingerers can be detected; that by a system of gradation of intensity of the sounds produced, any change in the acuteness of hearing from time to time can be accurately recorded; and that the acuteness of hearing for different sounds can be measured, the variations passing from musical tones to ordinary conversation.

Dr. W. H. Wathen, of Louisville, Committee on Gynecology, made a verbal report on the subject of urethral examinations in the female. After speaking of the difficulty experienced in these cases, Dr. Wathen announced that the difficulties might to a considerable extent be overcome by the use of a modified form of dilating forceps when properly manipulated.

Dr. John J. Speed, secretary of the Board of Health of Kentucky, reported on sanitary measures. He thinks some improvement has been made in the sanitary condition of the State, and that the prospect for continued progress is good. The board has placed in the hands of every doctor in the State

a blank-book for returns of marriages, births, and deaths. It has secured a list of twenty-five hundred names of physicians in the State whose attention has been called to the necessity of coöperation in order to secure any satisfactory result. It has appointed delegates to attend the Mississippi Valley Sanitary Association at Evansville, Ind., on the 20th of April. The next meeting of the board will be held at Hopkinsville July 1, 1881.

Reviews.

Drugs that Enslave: THE OPIUM, MORPHINE, CHLORAL, AND HASHISH HABITS. By H. H. KANE, M.D., New York City. Philadelphia: Presley Blakiston. 1881. 8vo. Pp. 224.

Dr. Kane is an industrious writer. In his way he endeavors to get at the entirety of a theme before he writes about it. In this instance he sent out more than ten thousand circulars and received nearly a thousand answers; and from these answers, from the general literature of the premises, and from his personal experience he draws the material for this book. Perhaps in these extensive means of information he found the impulse to write a more lengthy book than the information actually gleaned demanded. At all events there is a diffuseness, a superfluity of words in the volume that mars its merit, the demand of this busy age being that even good things pertaining to the practical affairs of the medical profession must be concise, and otherwise will be neglected if presented in too elaborate wrappings.

But one chapter is devoted to hashish errors as they are rare in this country, and about fifty pages are occupied with the facts obtained concerning chloral. This drug does not appear to be largely used for a pleasurable intoxicant, and where it is the habit is not hard to discontinue.

Opium and its alkaloids as "drugs that enslave" receive paramount attention and are treated of in seven chapters covering one hundred and forty-eight pages. The author announces the conviction that the opium-habit can always be cured if the victim can be properly managed, and this can be done readily in institutions that admit of complete control of the patient, but is very difficult if not impossible in private practice where friends will yield to the importunities or threats or alarming symptoms of the patient.

Dr. Kane does not approve of the plan of suddenly cutting

off the entire supply of the drug, as advocated in Germany by Levenstein and perhaps others, but he favors a rather rapid daily reduction of the amount so as to reach a minimum and the last dose in about eight days. He details one case wherein he tried the immediate withdrawal of the narcotic and the events that followed were such as to deter him from again following the plan. He also narrates the treatment in one case to illustrate the method he approves; but in reading it carefully one comes to the conclusion that if that be the best treatment such cases can have, the "best is none too good."

The patient was a young lady aged twenty-seven; tall, slim, weight ninety-eight pounds; using hypodermically six grains of morphia per day. She was put on active treatment, including diminishing doses of morphia which continued for eight days when the morphia was stopped, having meanwhile nervous disturbance, retention of urine, headache, irregular pupils, dyspnea, nausea, emesis, hysterical tetanoid spasms, collapse. At the time of the suspension of the morphia she was taking iced wine, milk, and lime-water, milk punch, bottled beer, strychnia, belladonna, lobelia, stramonium, capricum, hot hip bath, cold douche, electricity to her spine and ovaries, and massage. Notwithstanding this she fell into hysterical convulsions and within ninety minutes the doctor gave her three hundred and thirty grains of bromide potassium without benefit, and then arrested the spasms with a few whiffs of ether. Shall we marvel that after this there was collapse, vomiting, diarrhea, double vision, stupidity, and somnolence? Could the patient have done much worse if the morphia had been suspended at once and all the other medicines omitted? Is it not apparent that there can be too much medication in these cases as well as too little? Could the most acute diagnostician, by any possibility, tell how many of the symptoms on the ninth day were caused by suspension of the morphia; how many to attribute to the other drugs administered; and how many to the idiosyncrasies of the patient? One can hardly account the point settled by the doctor's cases that it is always better to break the opium-habit by gradually diminishing the

quantity given for eight days rather than to stop it all off at once. Indeed, if we do not find in Dr. Kane's book sufficient evidence to convince that all patients can not be best managed by any rigid rule of treatment, there is abundant testimony outside his volume to warrant the proposition that each case of the opium habit must be considered by itself, with the certainty of finding that some patients will be most satisfactorily managed by promptly cutting off all access to the drug, while others will promise best under the plan of Dr. Kane.

It must not be inferred that Dr. Kane's book is without merit because some parts of it are open to sharp adverse criticism. On the contrary there is much valuable information in the volume, and the practitioner will find in it stores of collected knowledge that will avail him well in the study of the intricate and often embarrassing disorders covered by its contents.

J. F. H.

Lectures on the Surgical Disorders of the Urinary Organs,
Delivered at the Liverpool Royal Infirmary. By REGINALD HARRISON, F.R.C.S., Surgeon to the Infirmary, formerly Lecturer on Anatomy and Surgery at the School of Medicine, and Surgeon to the Liverpool Northern Hospital. Second edition, considerably enlarged. London: Churchill. Liverpool: Adam Holden. 1880. Octavo. Pp. 398.

The reason why the enterprising publishers in New York and Philadelphia, who do so load our tables with reprints of foreign works, have failed to seize upon this thoroughly good work of Mr. Harrison will, we suppose, find its solution only in the formula of Dundreary. To our occidental minds it is clearly past finding out.

The volume contains thirty lectures upon the surgical disorders of the urinary organs, delivered by a well-trained, practical surgeon, who to unsurpassed opportunities for seeing and treating the affections of which he writes unites intelligence and in-

dependence; and, what is but little less desirable, adds to these essential qualities in an author a scholarly, concise, and modest way of speaking. This we feel is high praise, but we also feel that it is deserved. We would be glad to think that what we have said of Mr. Harrison's book would create a demand for it among our readers, for we are sure there is not among them all one who could read it without profit and pleasure.

Medical Heresies, Historically Considered: A Series of Critical Essays on the Origin and Evolution of Sectarian Medicine, embracing a Special Sketch and Review of Homeopathy, Past and Present. By GONZALVO C. SMYTHE, A.M., M.D., Professor of the Practice of Medicine, Central College of Physicians and Surgeons, Indianapolis; Member of the American Medical Association, etc. Philadelphia: Presley Blakiston. 1880. 8vo. Pp. 228.

Ninety-five pages of the volume are given to the historical review of medicine from the mythical times of Esculapius to the present. This is divided into eleven chapters; and while necessarily only a mere outline can be given in the space occupied, it is pleasantly and instructively written, signifying that the author has studied his subject carefully, and has the faculty—quite an accomplishment—of condensing a great and diversified theme into narrow limits and yet presenting its salient points both agreeably and intelligently. For this he will receive the thanks of some older busy men who are glad to have such a reminder of former interesting studies, and of some younger persons who rejoice in such stepping-stones over a vast field that they desire to look into, but do not at present wish to cultivate.

The remainder of the book—the larger part—is appropriated to a presentation of the principles and practice of homeopathy. The author imposes on himself the obligation to treat the affair seriously, avoiding ridicule; and beginning with copious extracts from the organon of Hahnemann as a sure foundation, he traces

the development of the dogma to the present day, picturing the three special theories which now divide the faith and practice of the disciples of homeopathy. Homeopaths will be gratified with the fullness and fairness with which the author presents their doctrines, though possibly some of them may feel that moderate ridicule would be more tolerable than some of Dr. Smythe's pungent sentences and puncturing logic, and medical men will be gratified to find that the author has, with commendable industry, scanned the field of homeopathic literature and society proceedings, and by liberal quotations from such sources given a better understanding of the existing status of homeopathic medicine than any ordinary practitioner could find time to obtain by his own investigations. This part of the book is well worthy the attention of all medical men who have curiosity concerning the doctrines and doings of the present generation of homeopathic practitioners of medicine.

J. F. H.

Hemiopia: MECHANISM OF ITS CAUSATION ON THE THEORY OF TOTAL DECUSSATION OF THE OPTIC-NERVE FIBERS IN THE OPTIC TRACT AT THE CHIASMA (OPTIC COMMISSURE). By WM. DICKINSON, M.D., St. Louis.

This eleven-paged brochure is a reprint from the January, 1881, number of the *Alienist and Neurologist*. The decussation of a part of the optic nerve in the chiasma has been so long insisted upon by all general and special anatomists that no other thought has pervaded the professional mind for nearly two centuries, and yet Dr. Dickinson has presented such evidence that any one reading it will, without hesitation, admit that he has made good his allegation that not a part but the whole of the optic nerve decussates in the chiasm—i. e. that no fiber of the nerve from the left brain goes to the left eye, but all of them to the right eye, and all the fibers from the right brain go to the left eye.

Sir Isaac Newton announced the partial decussation as a hypothesis, but subsequent scientists and teachers have promulgated it as a demonstrated fact, but now the author to prove it an error cites physiological experiment, clinical experience, comparative anatomy, and as a clincher the anatomy of the commissure itself. Biesiadecki "was so fortunate as to be able to *pursue every single fiber of one optic tract through the chiasma to the optic nerve of the opposite side,*" and this the author characterizes as the "coronal and *ne plus ultra* testimony, and must forever disarm argument, dispel doubt, and silence conjecture." And so it must.

Dr. Dickinson makes no claim to originality, but he has brought together the scattered facts to prove a conclusion in such a clear, intelligible, and agreeable manner as to verify the adage that "an apt quotation is as good as an original thought."

J. F. H.

A Practical Treatise on the Medical and Surgical Uses of Electricity: Including Localized and General Faradization, Localized and Central Faradization, Electrolysis and Galvano-Cautery. By GEO. M. BEARD, A.M., M.D., etc., and A. D. ROCKWELL, A.M., M.D., etc. Third edition. Revised by A. D. ROCKWELL, M.D. With nearly two hundred illustrations. New York: Wm. Wood & Co., 27 Great Jones Street. 1881.

All that we have said in commendation of previous editions of this well-known work can be said of this, and even more. No one interested in the many medical and surgical applications of electricity can do without this volume.

Dr. Rockwell is to be congratulated upon having reduced the number of pages in this edition, while at the same time increasing its value. Might there not be a still further reduction in quantity with a corresponding improvement in quality? Life is very short, and in these brief hurrying years seven hundred and fifty pages are a good many to be devoted to a single therapeutic agent.

How a Person Threatened or Afflicted with Bright's Disease Ought to Live. By JOSEPH F. EDWARDS, M.D. Philadelphia: Presley Blakiston. 1881. 12mo. Pp. 87.

If the injunction "Let every man be fully persuaded in his own mind" be a valuable qualification for an author, the writer of this book was the very man to undertake the service; for in his dedication he sets out in terms that he has superior ability for the task, and in his preface he assures his readers that there is great need of the service he is about to render; while all through the little volume there runs a savor of self-sufficiency that is quite remarkable. The author addresses himself to the invalids whose lesions he essays to teach them how best to manage in their modes of life, and he gives many most excellent instructions; but he so frequently evinces inadequate study in the physiology, pathology, and therapeutics involved that it is doubtful whether his book as a whole will prove of benefit to the class he addresses.

The style has a pertness about it that is not agreeable; but much in this direction should be pardoned on the score that it is the author's first effort, and that he writes for non-professional readers.

J. F. H.

A Practical Treatise on Fractures and Dislocations. By FRANK HASTINGS HAMILTON, A.M., M.D., LL.D., Surgeon to Bellevue Hospital, New York, etc. Sixth American edition, revised and improved. Illustrated with three hundred and fifty-two woodcuts. Philadelphia: Henry C. Lea's Son & Co. Pp. 909.

Certainly Prof. Hamilton has reason to be proud of the manner in which his work has been received by the profession. From the very first edition down to the present beautiful volume its teachings have been accepted, in the main, as authority, while the points on which its author is at variance with other surgeons are so few that it would be an ungracious task to specify

them. We congratulate the profession on having a work which affords such refuge in time of trouble, and its distinguished writer on living to see the labor of all his prime so thoroughly appreciated by surgeons every where.

We take pleasure in praising the publishers for the manner in which they have done their part of the work. The half-Russia binding would seem to be durable; it is certainly very handsome.

A History of Yellow Fever. THE YELLOW FEVER EPIDEMIC OF 1878 IN MEMPHIS, TENN.: Embracing a complete List of the Dead, the Names of the Doctors and Nurses employed, Names of all who contributed Money or Means, and the Names and History of the Howards, together with other Data and Lists of the Dead elsewhere. By J. M. KEATING. Memphis, Tenn.: Printed for the Howard Association. 1879. Pp. 454.

The very full title will convey a fair understanding of the character of this volume. The history covers what is known of the origin of yellow fever, the various theories of its nature, how it travels, its symptoms, diagnosis, and treatment. Then follows a chronology of the fever, reciting when and where it has appeared since its first recognition; and this is followed by a specific detailed account of the epidemic in Memphis in 1878. In this is included the condition of the city before the fever came, how it got there, the manner of its spreading, the method of management, its extent and fatality. In short, every thing is given that the author and his advisers thought would instruct the world or interest the inhabitants of the city and its neighbors, or those who had friends there during the epidemic. It is a sad and mournful story, but it is instructive withal, and the lesson it teaches should be known of all who are within the possible reach of a like calamity; and indeed there is something of value in the volume to every one who has sympathy for human woes or admiration for heroic devotion where human-

ity calls piteously for help and death imperils obedience to the call, or feels a heightened love for his fellow-man when he sees the perennial streams of saving charity flowing steadily from the circumference of civilization to the centers of suffering within its contour wherever and whenever the wail of want is heard.

J. F. H.

Science and the Healing Art: A NEW BOOK ON OLD FACTS. By JOHN CUSTIS DARBY, M.D., Mt. Sterling, Ky. Louisville, Ky.: John P. Morton & Co. 1880. Pp. 404. 8vo.

A most amiable, earnest, and erroneous book. Apparently written to expose the fallacy of all experimental scientific knowledge in medicine, and in the stead of current professional ideas founded on such data to substitute the author's own dicta, which evidently he deems infallible truth. He presents Dalton and Flint as visionary enthusiasts in physiology quite outside the circle of real knowledge, and Chambers and Bennett as fanciful speculators blinded by their own lopsided ideas. And all this is done so courteously, and with such a gracious, patronizing air of perfect wisdom in himself that no one will think harshly of his intention to subvert the teachings of these writers; but, on the contrary, with a heartfelt interest in the narrator, and in deference to his ingenuous candor, and with respect for his feelings, each listener to his theories and conclusions would say to him, "Certainly, doctor, your views are exactly correct."

Dr. Darby does not admit of destructive metamorphosis as a physiological condition, but asserts that a man's tissues grow from birth to maturity, and then remain intact until death; and in verification points to the fact that a man being absent from home for twenty or more years, will, on his return, remember every thing and every body, an impossible feat, he declares, to a man whose brain had in the meantime undergone structural regeneration.

Nor is the author's view of pathology more in accord with

current ideas of the profession than his physiology, and his therapeutics are of the old, old-school style, with liberal modifications growing out of his own idiosyncrasies. Emetics and cathartics are main pillars in the temple of true therapia, blood-letting is a sheet-anchor in certain emergencies, and calomel is the real Jupiter Maximus of the materia medica, the author quoting more than once the apothegm of the pious stalwart Scotch doctor who said, "With a vial of calomel and the blessing of God he could cure all the children in the kingdom." Either the vial or the blessing must be short, as children do die of disease in Scotland, or perhaps the good doctor could not spread himself over all the kingdom.

Dr. Darby is not a novice with his pen, having contributed liberally to the press, nor a new comer in the field of medicine, practical nor literary, having been a practicing physician and a diligent reader for nearly half a century. One can not peruse the polished diction in which he clothes his erratic ideas without having a degree of admiration for his command of language, his free and fluent style, and the *empressement* with which he announces his opinions and seeks to substantiate his conclusions, notwithstanding their incongruity with the accepted medical and general science of the day.

Writing this book must have been a labor of love with its author, and full of sweet satisfaction, and its publication is not likely to work any mischief, differing in this particular from many modern books issued from the medical press.

J. F. H.

The Descriptive Atlas of Anatomy: A REPRESENTATION OF THE ANATOMY OF THE HUMAN BODY, in ninety-two royal quarto plates, containing five hundred and fifty figures. Philadelphia: J. B. Lippincott & Co. 1880. Quarto plates and eleven pages of index.

This work is simply what it purports to be—nothing more, nothing less. It consists of a preface, which is short; of plates,

which are distinct, simple, and very complete; and of index, which is full and correct. It is without text, and is edited anonymously. Yet it is a useful book, and will, we predict, become popular both with students of anatomy and such physicians as feel the need of inexpensive but really good anatomical plates for ready reference.

Principles and Practice of Medicine: DESIGNED FOR THE USE OF PRACTITIONERS AND STUDENTS OF MEDICINE. By AUSTIN FLINT, M.D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc. Fifth edition, revised and largely rewritten. Philadelphia: Henry C. Lea's Son & Co.

This admirable work no longer needs the commendation of the press, and the fifth edition will increase its popularity. The laborious author has aimed to bring it in all respects up to the level of the present state of advancement in both the principles and practice of medicine, and it is safe to say that he has succeeded in his usual thorough manner. The reader will meet in it all the latest words on the subjects which it treats. The present edition is essentially a new work, constituting not only for the student the best text-book extant, but the practitioner can find no other volume in which the science and art of medicine are presented with so much clearness and in so condensed a style.

Hygienic and Sanative Measures for Chronic Catarrhal Inflammation of the Nose, Throat, and Ears. Part I. By THOM. F. RUMBOLD, M.D. St. Louis: Geo. O. Rumbold & Co. 1880. Pp. 174. 8vo.

In his preface the author informs that for twenty years his habit has been to lay down rules of hygiene to guide his catarrhal patients to a better management of themselves, and these

rules, he tells us, are embodied in his book, occupying the first eleven chapters. For this purpose these chapters may, perhaps, be of service, but they would have been not the less effective if they had been promulged in good diction grammatically correct.

In the part of the volume devoted to sanative processes, over twenty pages are occupied with a condemnation of the Weber nasal douche, a service well enough in itself, as undoubtedly the use of the douche is open to serious objection, but there is a large lack of logic in some of the author's positions of opposition.

The last chapter but one is a seven-barreled screed against the use of tobacco, and then a last chapter of a few words about the necessity and the best manner of arresting a cold in its earlier stages brings the volume to the index.

The matter of the book is commonplace, the style is not attractive, and the publishers have rendered their work neither accurate nor artistic.

J. F. H.

The Skin in Health and Disease. AMERICAN HEALTH PRIMER. By L. DUNCAN BULKLEY, M.D., Attending Physician for Skin and Venereal Diseases at New York Hospital, Out-patient Department; late Physician to the Skin Department, Demilt Dispensary, New York, etc. Pp. 148.

Brain-Work and Over-Work. AMERICAN HEALTH PRIMER. By Dr. H. C. WOOD, Clinical Professor of Nervous Diseases in the University of Pennsylvania; Member of the National Academy of Science, etc., etc. Philadelphia: Presley Blakiston. 1880. Pp. 126.

These are two of a series of twelve primers edited by Dr. W. W. Keen, of Philadelphia, written by men selected for their special ability to write valuably on the subjects assigned to them respectively. The books are square twelvemo, tastefully printed and bound in uniform style, sold separately for fifty cents a number, and are intended for popular instruction. An excellent thing would be for doctors to make themselves complete mas-

ters of the contents of the series, and then recommend one or another of them to their patients or friends as need might be.

Dr. Bulkley has written instructively on the skin both in its healthy and diseased conditions, and his remarks about soap in connection with the skin, describing good soap and how to use it, and bad soap and the harm it may do, would be worth more to the purchaser than the primer would cost him.

And Dr. Wood has also prepared his work with intelligence and skill. His second chapter is on General Causes of Nervous Trouble, and is of such character that many physicians as well as laymen might read it with benefit, and even some authors who assume to instruct the profession might find in its few words on alcohol and tobacco real knowledge that they are much in need of.

J. F. H.

Clinic of the Month.

ON CLOSING THE SAC BY CATGUT SUTURES IN HERNIOTOMY.—
F. A. Southam, F.R.C.S., writes, in the *Lancet*:

In the operation of herniotomy, where the sac is opened, the usual custom (excluding of course those cases where a radical cure is performed at the time of operation) is, after dividing the stricture and returning the bowel into the abdomen, simply to bring together the margins of the cutaneous wound with sutures of silk or silver wire. If, however, the cut edges of the opening in the peritoneal sac are in addition accurately brought into contact by means of catgut sutures, considerable benefit is derived, both as regards the more speedy healing of the wound and the prevention of extension of inflammatory action from the superficial structures to the interior of the sac.

I have recently availed myself of this modification of the method usually employed in closing the wound in six cases of herniotomy performed antiseptically in the Manchester Royal Infirmary, having, after reducing the bowel and clearing away all the blood clots and fluid from the interior of the sac, carefully adjusted the cut margins of its peritoneal walls, and brought them as nearly as possible into exact contact by catgut sutures introduced at a distance of about a third of an inch from each other and afterward cut off short close to the wound. The margins of the skin-incision were then brought together by sutures of carbolized silk in the usual manner.

In five out of the six cases the result was most satisfactory, the skin-incision in each instance healing at once by first intention, with very little general elevation of temperature, and without a trace of that deep-seated local pain and tenderness which are so often present, and which then indicate a certain amount of localized peritonitis.

In the sixth case death ensued from perforation of the bowel about twenty-six hours after the performance of the operation; but in this instance also union was apparently taking place by first intention, and on post-mortem examination the margins of the opening in the sac were found to be firmly adherent together.

Peritonitis is without doubt the most formidable complication that we have to encounter both before and after the operation of herniotomy, and is in the majority of cases the immediate cause of death.

Though we often find this condition already present or impending at the time of operation, yet in many instances it only makes its appearance after an interval of thirty-six or forty-eight hours, and in those cases where there is nothing in the condition of the sac or its contents at the time of operation to account for its subsequent appearance, it seems not unlikely that it may arise simply in consequence of extension of inflammatory action from the cutaneous wound, especially in the case of the old and feeble, whose powers of repair are not so great, and where the wound not healing so readily is more liable to become the seat of septic changes. If then by this simple proceeding, adopted merely as a safeguard against some of the later complications of herniotomy and without any idea of producing obliteration of the sac, as in the operations for radical cure, we can to some extent prevent the extension of inflammatory action from the superficial wound to the interior of the sac, we at once eliminate one of the causes upon which the occurrence of peritonitis after herniotomy must in many instances depend.

PUSTULA MALIGNA.—Dr. Timberlin, of Crépyen Laonois, France (The Medical Bulletin), first introduced to the profession the treatment of malignant pustule by sulphuric ether, and based it upon the following considerations: 1. Malignant pustule is due to an introduction under the skin or into a wound of a microscopic organism called *Bacteria carbuncosa*. 2. This organism dies at a temperature of 0° C. A consideration of these two facts led to the conclusion that the best treatment must consist in reducing the temperature of the part to 0° C., as in this way the destruction of the bacteria will be effected. The results of the treatment were afterward investigated by Dr. Vallesco, of Madrid, by means of numerous experiments on chickens. He also reports the following case: A child had been playing with a dog in a state of putrefaction. Ten days subsequently a little pimple appeared at the left side of the lower lip, which itched considerably and was continually being scratched by the child. On the evening of the day of its appearance the pimple became vesicular, the parts around it inflamed, and in it a sensation as if burnt. The vesicle was ruptured by the scratching and the sore became a black spot. On the following day this black spot became larger and more swollen. The patient felt very uncom-

fortable, with thirst and anorexia. At this time I was called. I found the black spot about the size of a twenty-five-cent piece, circumscribed by a ring of inflammatory deposit, on the top of which were several small vesicles containing serum. The parts were hard and the child complained of a burning pain. He had fever, coated tongue, weight in the epigastrium, great thirst, and anorexia. I diagnosticated malignant pustule, and directed the use of a solution of phenic acid, and gave as food beef tea. On the next day I found the same symptoms and atomized the pustule with ether, by means of Richardson's apparatus, morning and evening of that day. The same was repeated on the following day; subsequently the solution of phenic acid was alone resorted to. Five days afterward the general condition of the patient was excellent. The black spot came off, leaving an ulcer and a fistule, which closed six days later. The preceding observation Dr. Vallesco thinks proves without doubt the very great value of the treatment of malignant pustule by the atomization of ether.

CYSTITIS.—

R Acidi benzoici, }
 Sodii biboratis, } āā gr. x;
 Inf. buchu, ʒ ij.

This amount three or four times a day. (Skene.)

This may almost be called specific in its influence in the earlier stages of cystitis, affording rapid and lasting relief. The diet should be carefully regulated, and the skin and bowels kept in active condition.

EARACHE.—Wharton Jones, F.R.C.S., says, in the *Lancet*:

Earache means, pathologically speaking, acute inflammation of the membrana tympani. In such a case you may quickly subdue the inflammation, relieve the patient from the excruciating pain he is suffering, and save him perhaps from subsequent confirmed deafness by a treatment similar to that which you will find so beneficial in analogous cases of eye-disease, viz. leeches behind the ear, hydrarg. c. creta and belladonna powders, with warm fomentations.

A NEW SILVER SALT IN THE TREATMENT OF ORGANIC NERVOUS DISEASE.—Allan McLane Hamilton, M.D., of New York, makes the following communication to the London Lancet :

About three years ago it occurred to me that the combination of phosphorus with silver might well be worth trying. I therefore procured a sample of the tribasic phosphate of silver. The tribasic phosphate of silver possesses advantages over the other silver salts which entitle it to a fair trial. I have given it for months in doses varying from one third to half a grain without any skin discoloration whatever, and its administration is unattended by the gastric irritability that so often follows the use of either the nitrate of silver or the phosphide of zinc. At the same time its therapeutical effects are much more pronounced. It is best given with some such excipients as argol and glycerin, for vegetable substances tend to decomposition; and for this reason I have discarded the confection of roses as an element of the pill mass.

In the first edition of my work upon Nervous Diseases I directed attention to the probable advantages of this drug, especially in sclerosis of the posterior columns. The experience of two years has convinced me that it is my duty to urge others to make use of the remedy. In two classes of cases it has proved to be of great value :

1. In those of more or less acute myelitis with disturbance of the bladder and rectum. Not only in such cases of transverse disease has there been a decided improvement in the matter of control over the functions of these organs, but there has been a decided gain in the muscular power. This has been conspicuous in a very remarkable case of chronic meningo-myelitis seen in consultation with Dr. Todd, of Ridgefield, Conn.

2. In cases of sclerosis of the nervous substance. In seven cases of posterior spinal sclerosis there has been a subsidence more or less in the violence of the pains, and in those who have taken the drug for over a year the power of locomotion is materially increased.

In six cases of inveterate epilepsy, as the result of gross inflammatory intracranial changes, the patients have been relieved, judging from the diminution in the number of the attacks.

I am now giving the drug to patients with cerebral tumor and general paralysis, and while it would be out of the question to expect any thing like permanent cure in such hopeless diseases, I do believe that a persistent and proper use of the silver salt will do much more for the patients than any of the drugs hitherto used.

TREATMENT OF CHOLERIFORM INFANTILE DIARRHEA.—In the *Union Médicale du Nord-est* M. Luton describes his method of treating the summer complaint of children. It is considerably at variance with the ordinary methods of treatment now in vogue. Absolute restriction of diet is the prime requisite of successful therapy according to Luton. The only thing which the child is allowed to take is pure cold water. No other food or aliment is given. The water is given in copious draughts, provided the child shows its inclination to drink. All vials should be scrupulously clean. Luton states that the sick infants readily drink the water—in fact they seem to have an instinctive craving for it, feeling, as it were, that its effects are beneficial. Soon the vomiting ceases, and the diarrheal stools disappear after the noxious bowel-contents have once been evacuated. In twenty-four hours convalescence is as a rule established.

A point of some delicacy is to return to normal alimentation. The first step in this direction is to add a few drops of boiled milk to the cold water, which the infants should continue to take. Gradually the proportion of the milk to the water is increased, until finally the former may be given almost pure. Cold milk, without the addition of sugar, should be taken for several days longer; and if any return of previous symptoms occur, former treatment should again be employed. In ordinary acute gastro-enteritis, Luton makes use of rather large doses of silver nitrate (0.05 of the salt to 25.0 of water, a teaspoonful every hour), until unmistakable evidence of a remission is observed. Sometimes this event takes place after two or three doses of the silver nitrate have been administered. Of course the water plan is an essential addition to this method of giving large doses of nitrate of silver. Raw meats pounded, pressed, or minced, and especially mutton, are given with advantage during the progress of convalescence. (*Journal de Méd. et de Chir.*)

PITTING OF SMALLPOX.—Dr. Schwimmer advises a mask to be formed of very pliable linen cloth, leaving apertures for the eyes, nose, and mouth. The inside of this to be smeared with one of

the following liniments: 1. Carbolic acid four to ten, olive oil forty, and prepared chalk sixty parts. 2. Carbolic acid five, olive oil and pure starch, of each forty parts. 3. Thymol two, linseed oil forty, and chalk in powder sixty parts. The mask should be renewed every twelve hours. (*Medical Times and Gazette.*)

THE FEVERS OF THE MISSISSIPPI VALLEY.—In the *American Journal of the Medical Sciences* for April Dr. Richard B. Maury, of Memphis, makes a valuable addition to the literature of malarial disorders. After many years of practice in a malarial district Dr. Maury speaks from personal observation and experience, and cites many illustrative cases from his note-book. After quoting the clinical definition of bilious remittent fever as given by Wood and Flint, which differs in no essential particular from the description by Drake in his classical treatise on Diseases of the Interior Valley of North America, Dr. Maury concludes that the common view of bilious remittent includes two entirely distinct forms of disease—malarial remittent and malarial continued fever; the former commencing suddenly and lasting five, or, exceptionally, seven days, the latter being preceded by prodromes (malaise, chills, etc.), and continuing its course for twenty-one days, but bearing decided marks of distinction from typhoid. The fevers then of the southern part of the Mississippi Valley might be classed as (1) intermittent, (2) remittent, (3) malarial continued. To these might be added, by rare exception, typhoid fever and typho-malarial, the latter being regarded, as proposed by Dr. Woodward, as a hybrid true typhoid plus a malarial element rarely seen in private practice, but quite common in unacclimated soldiers camping in a malarial region.

STATISTICS OF AMPUTATIONS PERFORMED AT ST. FRANCIS'S HOSPITAL, JERSEY CITY, N. J., FROM 1871 TO 1881.—A summary of the amputations performed at St. Francis's Hospital during ten years is the basis of a paper containing the details of ninety-five cases, chiefly of railroad injuries, by Dr. Theodore R. Varick, Surgeon to the Hospital. A preference is expressed, as the

result of the study of these statistics, for the open method of treatment of the stump, with the use of antiseptics; and the importance of giving the injury a wide berth in amputation for railroad crush is dwelt upon. When tendency to retraction of the flaps exists, extension apparatus is applied similar to that used in treating fracture of the thigh. (*Ibid.*)

THE PROGNOSTIC SIGNIFICANCE OF INTESTINAL HEMORRHAGE IN TYPHOID FEVER.—Dr. Hartzell, of Philadelphia, concludes that while hemorrhage from the bowels may seem to ameliorate the condition of the patient, this is not the rule, as Trousseau and other eminent authorities have taught; but, on the contrary, the symptom is to be looked upon as decidedly unfavorable, raising the mortality from eighteen to forty per cent. He finds that peritonitis is also much more likely to occur in cases where hemorrhage has appeared. (*Ibid.*)

SCIATIC NEURALGIA CURED BY NERVE-STRETCHING.—Dr. Norman Mackintosh, of Colorado, reports a case of sciatic neuralgia of sixteen years' standing which resisted all ordinary therapeutic agents, and even grain-doses of morphia hypodermically had but a slight effect upon the pain. The paroxysms lasted from five to six weeks, during which time the patient could neither eat nor sleep; the intervals between the attacks became steadily more brief, and the suffering was almost constant. After laying bare the sciatic nerve and forcibly stretching it complete relief followed, and at the time of the report, four months after the operation, there had been no return of the pain, although the patient had been working daily on a farm. The wound healed by first intention. (*Ibid.*)

ACUTE CATARRH.—

R Tinct. iodinii, ʒ ss;
Acid carbol., ʒ j.

M. S. Place a small, wide-mouthed bottle, containing a moistened sponge, in a vessel of hot water; drop five to ten drops of the solution on the sponge; and, as the iodine vapor ascends with the vapor of the water, inhale it. (Bartholow.)

ACONITE IN REMITTENT FEVERS.—Dr. Gerald Bomford, M.D., of Fort William, Calcutta, writes to The Practitioner:

The good effects of aconite in this class of fevers may be summed up as follows:

1. It reduces the temperature.
2. It reduces the rapidity of the pulse, and makes it full and strong.
3. It cleans the tongue and restores the digestive functions.
4. It induces sleep.
5. It increases the quantity of urine, and seems to have a direct effect in removing the symptomatic congestion of the kidneys.
6. It promotes perspiration.

I may add that it is exceedingly grateful to the palate of a fever patient.

WARBURG'S TINCTURE.—“Warburg's tincture” is a nauseous compound much recommended for remittent fever. I have used it in many cases in Southern India, the land of its birth and greatest reputation, and I have always followed the directions implicitly; but it has never been my lot to find my patient wallowing in perspiration, and the room fragrant with confection of Damocratis, as has been so eloquently described by the advocates for its use. It is very expensive, extremely nauseous, and in my hands has proved itself useless. (*Ibid.*)

THE INTERNAL TREATMENT OF LUPUS.—Dr. James Startin states, in the London Specialist, that the most successful internal treatment for lupus has been small doses of cod-liver oil, say two teaspoonfuls, combined with the same quantity of the following:

R	Mag. sulph.,	lb. vj;
	Sulph. ferri iodidi,	O. jss;
	Ol. menth. pip.	ʒj;
	Aqua ad.	cong. j.

Misce ft. mist. Dose, one to two drams ex aqua (one dram contains half grain of ferri iodidi.)

Notes and Queries.

PROF. R. O. COWLING, A.M., M.D.—Dr. Cowling breathed his last at his home in this city at noon on Saturday, April 2d. He died of pulmonary embolism, the result of acute rheumatism. The onset of the rheumatic attack was so slight as to excite no uneasiness either in his own mind or in that of his physician. He sate up much of the time. He wrote some almost daily. He had weathered previous attacks of far greater severity, and had come out of them with a perfectly sound heart. Saturday, April 2d, he ate his breakfast, read his correspondence, and was thought to be convalescent. Shortly before noon he was suddenly seized with tumultuous action of the heart and overwhelming orthopnea. At noon he was dead.

Richard Oswald Cowling was born near Georgetown, S. C., April 9, 1839. He was educated in private schools in Louisville and in the Louisville High School, and was graduated in Trinity College, Hartford, as A.B. in 1861 and A.M. in 1865. He studied medicine in the University of Louisville and in the Jefferson Medical College, being graduated in the latter institution in 1867. In 1870 the *ad eundem* degree was conferred on him by the University of Louisville. In 1871 he visited the medical institutions of London, Vienna, and Paris—an opportunity by which he profited greatly. He founded the Louisville Medical News in 1876. From 1868 to 1873 he was Demonstrator of Anatomy in the University of Louisville, and became adjunct Professor of Surgery in the University of Louisville—a position which he held from 1870 to 1873. In the latter year he became Professor of Surgical Pathology and Operative Surgery, and in 1879 was made Professor of the Principles and Practice of Surgery, which he held up to the time of his death. He was Surgeon of the Short Line Railroad. In 1867 Dr. Cowling married Miss Mary, the daughter of Col. Samuel B. Churchill.

On Monday following Dr. Cowling's death the profession met almost to a man and passed resolutions suited to the mournful occasion. Letters and telegrams were read from those friends who could not be present. The profoundest sorrow was manifested by all. Dr. D. W. Yandell, addressing the chairman, said:

The dead man whom we are here to mourn was my neighbor; in his earlier medical studies he was my pupil; he subsequently became my colleague and companion; he was always my well-beloved friend. Dr. Cowling was by nature a strong man. His mind and person were both commanding. He had a wealth of mental and physical resources given to few men. His scholastic training was exceptional. He had won honors at Trinity College, and carried away her diploma. He had studied law. He had gained laurels in civil engineering and in the higher mathematics. And thus, when the time came for the study of the profession which he so much loved, he brought to it all these splendid attainments, all these powerful accessories. He laid the foundation of his calling deep among its roots. He early exhibited a taste for surgery and rapidly manifested a power to marshal and adjust particulars which bespoke the future master. He industriously stored his mind with the larger facts, the broader principles of the science. Hence his mental dignity in the presence of danger, his equipoise and efficiency in those supreme moments which come in the life of every surgeon. Dr. Cowling never grew afraid. When confronted by those awful emergencies his manner assumed a repose which is born alone to the nature of the truly great. As a teacher he was clear, pointed, forcible. As a practitioner, judicious, far-seeing, sympathetic. As a writer, ready, flowing, versatile, irradiating all that he touched with a humor whose light was a very joy; with a wit whose brilliancy nothing could quench, yet whose shafts rankled in no man's bosom. As an author he was vouchsafed just length of days enough to see his first methodical work stamped with the imperial seal of the classics—a work which it is safe to declare is, in its way, the best yet produced on the subject which it treats. As a man, courteous, genial, considerate, strong when strength was needed, he possessed a gentleness that was womanly. His was indeed a fine humanity. His mental rectitude was superb, while the woof of his daily life was composed of honor and truth running through which were the threads of whatever else makes manhood pure and worthy of imitation. No man in the profession shall feel more than I his loss, for no man was so intimately associated with him in his surgical work.

I was part of that which he but yesterday laid down. I was bound up in that which, had he lived, would have been sure to come.

The faculties of the several medical colleges of the city, the students in attendance upon them, and the clubs of which Dr. Cowling was a member met and expressed their deep grief at the loss of one so young, so strong, so useful. The directors of the railway of which he was the surgeon bore witness to his value as an officer in the following:

Resolved, That in his death the road has lost a most valuable officer, whose place can not be easily filled; a surgeon of confessed ability, whose skill and fidelity have saved life and restored injured men to health, whose kindness and sympathy went out to all who were hurt. He won the regard and affection of all with whom he was brought in contact.

The faculty of the Medical Department of the University of Louisville, of which Prof. Cowling was a member—

Resolved, That in the death of our beloved colleague the State has lost a valuable citizen, science a gifted son, and this institution an accomplished officer.

Resolved, That as a teacher, Dr. Cowling was comprehensive, luminous, and exact; as an operator, bold but cautious, daring but prudent; as a man, dignified, upright, generous, brave, with a child's simplicity of ways and disposition. A scholar of rare attainments; a thinker original, logical, sustained; a writer incisive, varied; a successful author, he added to the fame of the university which he entered as a pupil and where in time he rose to the rank of professor, a position which he in every way adorned.

Resolved, That we deplore his death as a public calamity, a keen personal loss.

Resolved, That a memorial address on the life and character of Dr. Cowling be prepared by Prof. D. W. Yandell.

“To those who knew Dr. Cowling intimately it is hard to realize that he is dead. There was a touch of the immortal about him. He never wearied or grew dull. He was always living, moving, enjoying, working. The occasion of incessant confidence and usefulness and happiness to those about him, no one is left to fill the peculiar place made vacant by his going. He had created it himself, and with him it passes away.”

KENTUCKY STATE MEDICAL SOCIETY.—The late meeting at Covington was one of the most successful ever held by this Society. The attendance was small, but the quality of the scientific work was particularly good, while in amount it was all-sufficient for the time allotted it. The miscellaneous business was kept well in hand and confined strictly to the proper limits. The discussions were general and animated. The reception given by the local physicians was an enjoyable occasion. The time of meeting in future will be the second Wednesday in April, while Louisville was selected as the permanent home of the Society. The officers for the ensuing year are: *President*, Dr. J. W. Holland, of Louisville; *Senior Vice-president*, Dr. C. Mann, of Nicholasville; *Junior Vice-president*, Dr. C. H. Thomas, of Covington; *Recording Secretary*, Dr. L. S. McMurtry, of Danville; *Assistant Secretary*, Dr. H. Brown, of Hustonville; *Corresponding Secretary*, Dr. S. M. Letcher, of Richmond; *Treasurer*, Dr. J. D. Neet, of Versailles. The Committee on Prize Essay consists of Dr. Dudley S. Reynolds and Dr. D. W. Yandell, of Louisville; Dr. H. Skillman, of Lexington; Dr. C. H. Todd, of Owensboro; and Dr. Alex. H. McKee, of Danville. This committee will at an early day make known the rules for the government of the competitors for the prize.

INTERNATIONAL MEDICAL CONGRESS, LONDON, 1881.—The following subjects, in addition to those previously announced, have been proposed for discussion:

Section IV. (*Medicine*).—1. Localization of Disease in Brain and Spinal Cord, so far as pathognomonic and diagnostic; 2. Trophic Changes of Nerve-origin; 3. Vascular Changes, Functional and Organic, in Disease; 4. Primary Diseases of the Lymph-system; 5. Gout, Rheumatoid Arthritis, and Rheumatism; 6. Forms of Renal Disease (Bright's Disease); 7. Methods of Physical Diagnosis; 8. Therapeutic Methods: Revulsions, Blood-letting, Diet-cure, Uses of Heat and Cold, Drug-cure, etc.

Section I (*Anatomy*) will receive communications relating to any of the following subjects: 1. Human Anatomy, descriptive,

microscopic, and topographical; 2. Embryology and Teratology; 3. Anatomical Anthropology and Anthropometry; 4. Comparative Anatomy in so far as it illustrates structural changes in Man; 5. Improved Methods of Instruction in Anatomy, and of preparing and preserving Anatomical Specimens.

Section XI. (*Diseases of the Skin*).—1. The Relation between Constitutional Diseases and Diseases of the Skin; 2. The Nature and Treatment of Lupus Erythematosus; 3. The Influence of Climate, Difference of Race, and Mode of Living upon the Development and Character of Diseases of the Skin.

THE LOUISVILLE MEDICAL NEWS.—The publishers of the News have secured as its editor Prof. J. W. Holland, M.D., a gentleman already known as an able chemist, an eloquent lecturer, and graceful writer. He says in his salutatory, after paying a just tribute to the lamented founder of the News: "His successor deprecates comparison with him, feeling emulous rather than equal, and begs for a while the indulgent regards of all who shall find in the change a foil to set off to greater advantage the high qualities of the deceased. It remains for the reader to take for what it is worth the pledge that in the editorial task of making a little saner this corner of the world, he shall do

‘Distinctly his full function.’”

THE McDOWELL MEDICAL SOCIETY will meet in Hopkinsville, Ky., May 25th. A large attendance is expected. The programme—which has not yet reached us—will, we doubt not, show an amount of work sufficiently large to occupy every moment of the two days which the Society allots to its sessions. Physicians desiring further information will address Dr. B. F. Eager, Secretary, Hopkinsville, Ky.

DR. J. MARION SIMS.—The pleasant intelligence reaches us from St. Augustine, Fla., where this distinguished physician is staying, that his health is steadily improving.

THE AMERICAN PRACTITIONER.

JUNE, 1881.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

ON THE IMPROVEMENTS IN SURGERY.*

BY FAYETTE DUNLOP, M.D.

On reviewing the surgery of the past twelve months it is evident that no sudden leaps or brilliant achievements have marked its progress, yet in no sense has the zeal or spirit of surgical science been diminished. In every direction we find able, steady work being done, with the effect of gradually advancing this branch of science. Progress in the art of surgery is to be measured not so much by the rapid introduction of new plans and measures as in the firm establishment and more widespread use of means already recognized as of value. The avidity of the human mind for novelty is as well illustrated in the medical profession as in any other calling, yet among none is there more skepticism as to innovations and none which requires more intelligent experience to give new things a fixed place among its measures.

* Being the report of the committee on this subject read before the Kentucky State Medical Society, April, 1881.

The surgery of the kidney has within the past year attracted much attention, and the reports of operations both for incision and entire removal of this viscus have been far more favorable than was at first anticipated. This, no doubt, has been effected by the comparative safety with which the abdominal cavity can now be opened and its contents manipulated. Attention was first directed to ablation of the kidney by Simon of Heidelberg, who, accidentally dividing the ureter in an ovariectomy, at once removed the kidney to which it led, in order to prevent the disastrous results of the mishap. A number of subsequent experiments on the lower animals convinced the German surgeon of the practicability and value of the operation under certain conditions, and proved that the renal function could be adequately carried on by one kidney alone. During the past year this operation has been done in various parts of the world, and with much the same success which attends the removal of the uterus, ovaries, etc. Extirpation of the kidney, however, is not to be undertaken unless the remaining organ is satisfactorily performing its function. The operation is indicated in such wounds as threaten to prove fatal from hemorrhage, exhaustion, and suppuration which an incision has failed to relieve, calculous disease not curable by simple incision of the kidney, morbid growths, fistula of the ureter, etc. Two modes of doing the operation have been practiced—one the extra-peritoneal, the other by abdominal section. The choice is determined by the conditions which exist in each individual case. Incision through the lumbar region has so far been oftenest performed and with the best results, owing, no doubt, to the fact that in this region such exploratory incisions as may be required to determine the need of an operation are made with ease and with comparatively little danger. The operation is contra-indicated in carcinomatous and sarcomatous diseases, in cysts and burrowing abscesses. The removal of the kidney by abdominal section is done in a similar way to ovariectomy. The chief difficulty encountered here is as to the mode of disposing of the stump. The blood-vessels are so short that the clamp can not be considered. Tor-

sion and the catgut ligature have both been employed, the catgut being left in the wound with no untoward symptoms. Death suddenly occurred after the operation in one case. The autopsy revealed a large clot which had escaped from the stump into the vena cava. We know of no means for avoiding this risk.

Incision in the lumbar region for removal of calculi in the pelvis of the kidney has been successfully performed, but owing to the difficulty of diagnosis in these cases the operation has been attempted but a few times. On the whole, the success of both procedures has been encouraging, and they are now justly ranked among the established operations. Another year will probably find them often practiced.

The rapid adoption of Bigelow's operation, as it is called, and the very marked favor accorded to it, shows that the professional mind was ready for an improvement in this direction. Experienced lithotritists, the only competent judges, both in this country and abroad, have tested its merits, remedied in large degree such defects as were attached to the original instruments, and in a little more than three years since its introduction the operation is pronounced a most valuable addition to our means for removing stone from the bladder. By Bigelow's method a great number of vesical calculi have been evacuated at a single sitting from aged and infirm subjects with a comfort and safety far beyond that which could have been had either from the old lithotripsy or under the knife.

To one familiar with the details of lithotripsy the size and composition of the stone can be pretty generally determined, when the choice of the lithotrite becomes easy. The largest sizes are seldom required, and the careful surgeon will avoid them unless they be absolutely necessary; for the smaller the instrument the less likelihood of mischief. Because Bigelow's method proves so successful in the hands of those whose experience in lithotripsy justifies its use as a test of its efficacy, it must not be understood that it will give like results in the hands of every one who may resort to its use. There is no doubt that lithotomy for a stone of large size is a safer measure in the

hands of one unfamiliar with the details of lithotrity than Bigelow's method. Even the general adoption of the new method will not altogether do away with the knife, for there are numerous conditions which preclude lithotrity; among them the size of the urethra, shape and hardness of the stone, and the state of the bladder. The chief and most important feature established by Bigelow is the tolerance of manipulation shown by the bladder. Hitherto it has been the belief among surgeons that the bladder will bear none but the gentlest manipulation without serious consequences. Bigelow has established that the bladder is exceedingly tolerant of at least all the injury which his method is likely to inflict. If the bladder is thoroughly cleansed of all debris, even though the mucous membrane has been wounded it readily heals, the failure to bring about recovery in the older methods being due to irritation by the sharp angular fragments. Special attention has been given to the matter, and convincing evidence of unlooked-for tolerance of the organ has been afforded by a sufficient number of cases. The adoption of the method has the further advantage of enlarging the range within which lithotrity is applicable, and it encourages the surgeon to deal with much larger stones than under former methods. What the limits of the operation as determined by the size of the calculus really are, further experience can alone decide; but the prospect of greatly diminishing the number of cases subjected to lithotomy on account of the dimensions of the calculus—a class in which the mortality is especially great—seems almost certain to be realized. Experience has proved the truth of Bigelow's maxims in the main, and we can with security look for the general adoption of the plan he has devised. Its imperfections being recognized, another year will perhaps record their removal. Any new device that fails to meet the general approval of the profession, and the use of which is limited to a few specialists, will usually fail of adoption and fall into disuse. It is the confident expectation of your reporter that but few years will go by ere the lithotrite and exhausting-bottle will be found in the armamentarium of the village surgeon, and with

further experience the results of their use will be better than at present. Sir Henry Thompson, who has done more lithotrities than any one else, lends Bigelow's method the sanction of his great name, and states it to be an advance in lithotrity. Billroth too accepts it and gives it his unqualified indorsement.

Prof. Esmarch has somewhat modified the manner of applying the rubber bandage and the subsequent treatment of wounded surfaces. He no longer at once removes the constricting tube, but first ligates the bleeding vessels and brings the edges of the wound together with deep sutures, and keeps the limb in an upright position for half an hour. He then makes the permanent dressings and puts the limb in the horizontal position. A sufficient number of cases have already been treated in this manner to prove that secondary hemorrhage is rare, while there are many advantages in the matter of time, cleanliness, etc. Esmarch prefers the simple dry dressing to any other, and allows it to remain twelve or fifteen days without removal.

Operations for the correction of deformities in the bones have been repeatedly performed during the year with a success which will still further stimulate those surgeons who live where such diseases exist. There are already those, however, who think they see that practice in this direction has exceeded its proper limits. However this may be, we know that many deformities arising from constitutional causes, and which were until recently regarded as irremediable, are now, by the genius of modern surgery, overcome, and limbs and joints made useful and comely which were before misshapen.

Since ovariectomy revealed the extent to which the pelvic and abdominal organs can be manipulated without fatal results, it has also been attempted to remove tumors of the uterus, and even that organ itself. In the removal of simple myomata the results have been proportionately favorable. The extirpation of the uterus for carcinoma or any variety of malignant disease, proposed a few years ago by Freund, has been the subject of earnest investigation during the past year. At no period since its beginning has the prospect of its adoption been hopeful,

and at the present writing it is gloomy indeed. Various methods have been tested, each suggested by the conditions indicating the operation, but as yet no real advantage can be claimed for the one over the other. The results, whether the organ is taken out through the vagina or by abdominal incision, are about the same; which the operator will select is governed largely by varying circumstances. Schroder, who seems to have had the most satisfactory results, all things considered, adopts the vaginal incision, and claims that it is more easily and satisfactorily performed; the shock is not so severe, and the danger from either primary or secondary hemorrhage far less than by the abdominal incision. The chief difficulties heretofore encountered have been to control hemorrhage and dispose of the stump. Quite a number of cases have borne the shock of the operation well, escaped pelvic peritonitis and abscess, and finally died of slow secondary hemorrhage into the abdominal cavity. As regards the indications, in the first place many cases do not occur in which the entire uterus must be extirpated. The operation should not be performed when carcinomatous disease exists in the pelvic connective tissue. Not only extensive infiltrations, but quite small nodules in the folds of Douglas's cul-de-sac form a contra-indication. Where only the body of the uterus is invaded, and entirely above the internal os or vaginal junction, removal by laparotomy, and only so much of the organ as is involved, is the chosen operation. Total extirpations are called for when the cervix is affected and the vaginal walls, and all the cellular tissue involved must come away. In this way the measure finds its limits; if the disease has gone too far, operation is impossible. Of course it is plain that a procedure involving so many risks and the benefits to be derived of a character so questionable will fail of general adoption, while its performance must rest in the hands of a few gynecologists.

There is no part of the surgical practice instituted by Mr. Lister which has more interest than his reintroduction of the animal ligature. A number of recent experiments by Arnaud

in Paris and Lister himself fully demonstrate the truth of the belief long ago expressed by the friends of the antiseptic practice, namely, the complete absorption of the animal ligature. It is further claimed that the outer coat of the artery is not ulcerated as by silk and hemp, but that the knot becomes loosened before that process begins. While clinical experience and numerous experiments have done much to favor its use, the opinion of the profession is far from unanimous. The desire for a ligature which would not act as a source of irritation has long been a dream of the surgeon, and seems now about to be realized. With a view to ascertain the rate and certainty of absorption of catgut of different preparations, Prof. Lister thinks he has now established the catgut as the ligature of the future. Imperfections in its preparation and its use in unsuitable cases may explain a part if not all of the failures which have attended its employment, and we grant that some improvement in its preparation is still demanded. The difficulty of preventing the knot from untying from prolonged immersion in blood and the secretions of the wound seems now to be averted by a method of preparation devised by Lister. This method can be found in the *London Lancet* of January 22, 1881.

We approach now that portion of our report which has been the field for more earnest debate and diversity of opinion than any which has ever occupied the surgical mind; namely, antiseptic surgery. The treatment of wounds now, as it ever has, occupies a considerable share of attention; and though surgeons are as little agreed as to the methods and details to be employed, yet they are more and more one as to the object aimed at. Antiseptic surgery is practiced or claimed to be practiced by nearly all surgeons, and it is safe to say that their success or failure is in a great measure governed by their preconceived idea of its efficacy. Whatever advantages this popular surgical procedure may possess, there can be no question that it is in danger of being brought into disrepute, solely from an unintelligent manner of its use; and unless some uniform method is soon decided upon it can not fail soon to fall into ill-favor, as the term

of its probation has been one of unusual length before the profession. No more deplorable reputation could befall Listerism than that of infallibility, which would absolve the surgeon from further responsibility and from that zealous care which the former method imposed. While no advance can be recorded for this department of surgery, it is much to say that it has lost none in favor, and its champions are as active as ever and constantly strengthening their position with the impregnable fortification of success where it is claimed failure would have been recorded. In the matter of rendering its details and application more simple and within the power of all, there is a disposition to do away with the spray as useless and in no way adding to its good results. It is claimed, and seemingly with reason, that in peritoneal incisions the spray is irritating, the rapid evaporation induced by it too cooling for the exposed intestines, and that poisonous quantities of the acid are absorbed in prolonged operations. The proceeding is yet too new to be universally adopted, and has too much in its favor to be hastily condemned on the authority of a few. Not until the present enthusiasm and thirst for notoriety of its advocates have given way to the irresistible logic of facts can we hope for unprejudiced, calm decision of its value.

The success which was stated to have followed the administration of Chian turpentine in cancerous disease was so marked that more than ordinary notice was at once directed to it. It was introduced under the sanction of the well-known name of John Clay, of Manchester, and claimed by him to be palliative if not absolutely curative in cancerous affections, particularly those of the generative organs. So far the hope so often kindled and as often disappointed has failed to be realized in Chian turpentine after thorough and intelligent test of its value. The cases in which it is reported to have been of benefit are open to the fatal objection of not being cancerous in their nature; that it has surely failed in undoubted cases of cancer of the uterus; and its supposed success is due to the fact of the difficulty of diagnosis of malignant disease of the generative organs in its early

stages. We risk nothing in asserting that Chian turpentine will be entirely discarded as a cure for malignant disease, the hopes and expectations centered in it dissipated, and the eyes of the profession turned in another direction in search of the long-hoped-for discovery.

The pages of surgical literature have been filled with valuable contributions, embracing every department of the surgeon's duties. The ill effects of the pursuit of any specialty to the utter exclusion of a general study of surgery has been dwelt upon and deprecated by all who have given the subject attention. About the average number of works on surgery, with the revision of some of the older and most acceptable ones, have been issued, showing plainly no lack of zeal in the endeavors to advance the interests of surgical science.

DANVILLE, KY.

A CASE OF OVARIOTOMY.*

BY W. O. ROBERTS, M.D.,

Demonstrator of Anatomy, University of Louisville, etc., etc.

Mrs. M., aged fifty-nine, mother of six children, the youngest twenty-three years old, has not menstruated for fifteen years. Three years ago general health having been good with exception of occasional severe attacks of flatulent colic, she noticed for the first time a tumor about the size of a cocoanut situated in the side of her abdomen, which increased until October, 1880, when it completely filled the cavity. I now saw the case in consultation with Dr. Cox, and found her condition as follows: Abdomen greatly distended, with marked prominence of superficial veins, fluctuation elicited by percussion, respiration considerably interfered with, feet and legs slightly swollen, appetite much

* Read before the Kentucky State Medical Society, 1881.

impaired, sensation of great fullness and difficulty of breathing following meals, bowels constipated and much pain in back and legs caused by slight exercise. Ovarian dropsy diagnosed, and to give temporary relief the cyst was tapped, and two gallons of thick, greenish fluid were drawn off. Patient remained in bed but a day after the paracentesis, got up and attended to her household affairs, but for days had soreness and tenderness of abdomen. The cyst soon began to refill, and by December 15th appeared as large as before tapping. She now consented to removal of the tumor, and was sent to SS. Mary and Elizabeth Hospital to be prepared for the operation. In the latter part of the month she was seized with what she considered one of her old attacks of colic, the symptoms of which were as follows: Great pain and tenderness over whole abdomen, with some increase in its size, excessive vomiting, pulse weak and irregular, expression anxious, surface of body pale and cold, voice husky, bowels constipated, and urine scant and voided with great difficulty. This condition was followed for several days by slight fever, during which the tenderness and pain in abdomen continued, while the urine was scant, high-colored, and had required to be drawn off. She recovered from this attack very slowly. She was confined to bed for ten days, and was unable to get about her room for some weeks.

On March 2d her condition had so much improved it was decided to operate. This was done under strict antiseptic precautions, Prof. D. W. Yandell, Drs. Cox, Cottell, and others being present. On opening the peritoneum a considerable quantity of turbid serum escaped. Adhesions were found connecting the sac to the omentum anteriorly and abdominal walls posteriorly, the separating of which was followed by some hemorrhage. The sac was multilocular, and contained twenty-six pints of a thick, greenish-colored fluid. Pedicle broad and short. This was ligated with silk, cut, and returned. Intestines were coated with newly-deposited lymph. After thoroughly cleansing the cavity, wound was closed with silk-worm sutures, the patient was placed in bed and given an opiate, to be repeated in two

hours if in pain. First hour after the operation pulse 90, temperature 98° , great pain in abdomen, had vomited the anodyne. A half grain of morphine hypodermically was soon followed by complete relief. From now on patient recovered without one bad symptom. Her temperature never exceeded normal except on the third day, when it reached 100.7° . During the first three days there was some vomiting—not excessive—during which time she took Vichy water and crushed ice alone. One fourth of a grain of morphine was administered every six or twelve hours for the relief and prevention of abdominal pain. The dressing was not disturbed until the seventh day, when the wound was found completely healed, and the stitches were removed. The patient sat up in bed on the tenth day, and was anxious to get up, declaring that she felt better and stronger than she had for months. This, however, I need not say she was not allowed to do until the end of the third week.

LOUISVILLE.

IS TYPHO-MALARIAL FEVER A DISEASE PER SE?

BY RODNEY T. TRIMBLE, M.D.

It is scarcely necessary to say that the term typho-malarial fever is used to designate a fever which is thought to partake of the character of both typhoid and malarial fevers, and was coined, I believe, by Dr. Woodward.

Professor Loomis, in describing typho-malarial fever, admits two principal types, the typhoid and the malarial. He follows closely Dr. Woodward as to the intestinal lesions, but differs with him as to the etiology of the affection. Prof. L. says, "It is difficult to determine the true etiology of typho-malarial fever, but that malarial poison is necessary for its development there can be no question. It is equally certain that some other poison is

in operation whenever the fever prevails; that this poison is not the specific poison of typhoid fever. There are two or three facts connected with its development which are now well established: First, it is only met with in malarial districts. Second, in the majority of instances where this fever has prevailed, its development has been preceded by marked and readily-recognized anti-hygienic conditions, such as overcrowding, bad sewerage, and other conditions favorable to the development of septic poison. Third, that it is a non-contagious disease, and is never propagated from the diseased to the healthy, either directly by personal contagion, or indirectly by morbid excretions."

The doctrine of Dr. L., then, is briefly that there is a disease manifested by constant and characteristic symptoms produced by the combined effect of malarial and septic poison; that it is entitled to a name as a distinct disease; and finally, that it has certain characteristic lesions of the intestinal tract, particularly of Peyer's patches, different from those observed in typhoid fever.

Septic poisons may mean a great deal in the broad sense in which Professor Loomis uses the word. No doubt septic poisons are produced within the body itself by the retrograde metamorphosis of tissue, or they may in various forms be absorbed from without. In either case, malaria may exist simultaneously in the human organism and be modified by such influence; but where the factor, septic poison, is so variable, the symptoms surely could not be constant and characteristic except as pointing, perhaps, to the typhoid state. To such a condition we are hardly justified in applying a new name; it should, I think, be considered not a new disease, but a form of malarial fever. Professor Loomis himself does not regard it as being a new disease, for he says, "It can not be regarded as a new disease, but in its morbid anatomy and symptomatology is a combination of two well-recognized forms of fever. The special symptoms and lesions of one or the other of these fevers stamp its character and indicate its alliance to a malarial or septic type of fever."

It would appear that the reference to the morbid anatomy in this quotation does not correspond to the previous statement

that typho-malarial fever has certain characteristic pathological lesions. Prof. L. says he follows Dr. Woodward closely in his description of these lesions, and that, according to Bartholow, Woodward has changed his opinion as to the existence of such lesions, and quotes Dr. Woodward as follows:

"The autopsies of these cases (typho-malarial fever) disclosed the ordinary lesions of typhoid fever. During my earlier studies I believed that I had observed certain peculiarities in the character of the ulcers in these cases by which they might be distinguished from the lesions of simple typhoid. A larger experience, especially examination of a large number of specimens received by the medical section of the Army Medical Museum, has convinced me that this opinion was premature. I renounce it as erroneous. There is really nothing in the lesions of Peyer's glands in these cases to distinguish them from ordinary cases of typhoid fever."

After this, I must believe that the cases described by Professor Loomis as exhibiting such lesions, were cases of typhoid. According to our view, Professor Loomis embraces under the term typho-malarial two distinct forms of disease—malarial fever and typhoid fever.

The theory as to the union of the two poisons is the one I believe generally held by those who claim that typho-malarial fever is a disease *per se*. It may be stated thus: The two poisons (typhoid and malarial) are present in the system and in active operation at one and the same time, so modifying the effects the one of the other as to produce symptoms so constant and characteristic that they are collectively entitled to be called by a new name. This doctrine, coming with the weight of authority, deserves attention. That two or more specific poisons may infect the system at the same time is doubtless true, but generally in this case one only is active at a time. Among other instances given to illustrate this, is mentioned vaccination, which being performed on persons sick with measles the vaccine poison remained latent and took effect only after the measles had finished its course.

The eruptive fevers are usually met with as distinct and separate affections. Shall typhoid fever alone be considered the exception? I am aware that all these affections are influenced by circumstances to a certain degree, but only to a degree, their identity never being completely lost. Even malarial fevers, though they may appear under several forms, still in each the type is sufficiently clearly preserved to show that they all have a common origin. Malaria differs from the other infectious poisons mentioned in that it is not self-limited; in its action it tends to chronicity, and hence more than the others to create a peculiar diathesis. Its modifying effect in this way over other affections is clearly established. No one who has practiced in a malarial region can doubt the specific utility of quinia in most of the acute diseases he encounters. It is easy to understand how malaria may even have a great deal to do in producing a variety of acute diseases, such as pneumonia, hepatitis, splenitis, etc. Malaria often, in fact constantly, has local manifestations. But in acute infectious diseases the effect of malaria in modifying their course is much less apparent. Descriptions of the eruptive affections by one practicing in a malarial region very widely differ from those drawn by one who never met the marsh poison. It will be observed that I do not deny that one disease may be modified by another, especially when that disease is malarial. I wish merely to narrow the limits in which this occurs.

Trousseau held correctly that one disease can not be converted into another, though for a time they may assume the features of another, especially in the instance of epidemic influences, but identity is never lost.

It is well also to remember that when the course of a disease is not exactly typical it is not logical to suppose there must be another specific poison at work. There are many other influences besides specificity, as amount of poison, vitality of subject, age, sex, etc. That the special poisons of typhoid and malarial fevers may manifest themselves at the same time in the same subject, may be answered in the affirmative, this view being supported by Dunglison, Wood, Flint, and Da Costa. Trousseau

virtually admits it, and Hertz (Ziemssen's *Cyclopedia*), does not deny it. But that the simultaneous manifestation of the two diseases is of frequent occurrence has given rise to great difference of opinion.

My own very limited experience corresponds with the following quotation from Hertz: "The same thing does not hold true in regard to typhoid fever, the epidemic appearance of which is not often simultaneous with that of intermittent fever. I do not assert a complete mutual exclusion as to time and place between these two diseases; but this much I can declare from my own experience, that in Amsterdam, where all forms of malarial fever are indigenous, typhoid fever is among the greatest rarities. The annual statistics of two thousand cases of sickness in the division of medical diseases show barely one or two cases of typhoid fever.

When the two diseases do manifest themselves together, what is the result? Usually but to mask for a time the typhoid disease by certain malarial characteristics, the case becoming more clearly defined typhoid as it advances. The peculiar symptoms, however, are neither so constant nor marked as to justify a new name or regarding the condition as distinct disease capable of being diagnosed as such. I agree with Bartholow, that the term typho-malarial tends to encourage carelessness in diagnosis. Even the most obscure cases can, as a rule, be finally shown to be either typhoid or malarial—one, not both. All the cases I have met with called typho-malarial were, in a specific sense, malarial simply without any typhoid. And I think the disease called Chickahominy fever, and which Dr. Woodward describes under the name of typho-malarial fever, was clearly malarial. I am confirmed in this opinion by Dr. Manson, of Richmond, Va., who, in describing the malarial fevers of his section of country,* speaks of continued malarial fever with typhoid symptoms, but as entirely distinct from typhoid, and capable of being diagnosed from it, but who nowhere mentions a disease produced by the union of the two poisons.

* Richmond and Louisville Medical Journal, August, 1871.

In regard to my own experience. I practiced for a few years at Hillsboro, Ohio, a place then remarkably free from malaria. There I frequently met with typhoid fever, having in a local epidemic seen as many as eighteen cases in quick succession in a negro settlement. In these cases, in spite of the negative evidence furnished by the dark skin of the negro as to rose-colored spots, I am clear that the disease was simple typhoid fever in every instance. They were carefully watched. A record was kept of the temperature and all important points. The tendency to spread locally by contagion, in the general sense of the word, was strikingly manifested, and the disease was confined to the same locality throughout its prevalence. At New Vienna, where I have lived for the past nine years, malaria prevails in all its forms. My experience here with typhoid fever has been much less extensive than at Hillsboro. In every single instance where it has prevailed it has clearly been imported, and save in one has spread by infecting those who had the immediate care of the sick.

The first case at Vienna occurred in 1873 in the practice of another physician, and was imported in the person of an insane young man from Dayton, who came home sick with the disease. The difficulty, which at first was great, owing to the previous history, was to diagnose the disease from dementia resulting from gradually increasing brain-trouble. The case, however, soon became clear, and several other members of the household were seized with genuine typhoid. After this the disease did not occur again for four years, when in April, 1877, a young lady returned from college sick with the disease. Here my diagnosis as to the nature of the case was confirmed by Dr. Morey, who has had a very large experience in the malarial fevers of this region. The case was a typical one, even to the rose spots. The disease infected several different families, spreading from those living at the house to other and somewhat distant households. There were four or five cases to be directly traced to this single point of infection. This may be explained by the fact that before the patient came under obser-

vation a privy was used in common by the household to receive the alvine discharges.

In the following July the disease reappeared in Vienna for the last time. A young man returned from Cincinnati with typhoid fever and furnished the only case out of those I have mentioned in which there were malarial symptoms of note, yet even here I think there could be no question of the accuracy of the diagnosis, for although in this instance other cases did not follow, the explanation is, I think, to be found in the fact that being seen immediately on its arrival the alvine dejections were disinfected and buried.

I regard the foregoing account of typhoid fever as being interesting from the fact that in every instance it could first be traced to importation and its subsequent spread by contagion from the alvine discharges of the sick. The history further shows how little the symptoms were, as a rule, influenced by malaria, though this is constantly present in the locality. Not only were the typhoid fever cases readily diagnosed after a short time, so marked were the symptoms, but it was observed at the time that cases of malarial fever did not then nor afterward assume typhoid symptoms. It will be understood from what I have said that my experience in malarial diseases has necessarily been considerable. Marsh fever in its various forms I have seen over and over again, and I have not infrequently encountered it as a continued fever. The type has sometimes been very grave, early producing the typhoid condition, especially when the temperature remained high for any considerable period. It is interesting to note that the mortality in this class of cases has been greater than in typhoid fever proper; also that cases of this description were called, in my section, typho-malarial. It is my belief that the same error is made elsewhere.

In no instance in my experience have the characteristic symptoms of typhoid been present, and in no instance has the disease spread by contagion, though no care whatever was taken to disinfect the alvine discharges. Nor has it been confined to any particular locality, while quinine has generally shown its specific

power if not fully at least to some extent. If the typhoid poison had any thing to do in developing the disease in any case, it certainly was shorn of its most prominent characteristics, and could not be recognized by its work. For my part I believe it much more rational to look for the operation of other influences, as high temperature, etc., producing the typhoid condition than to charge it to the specific germ—if I may so call it—of typhoid fever.

For my own part, I am clearly of the opinion that the affection called typho-malarial fever is not a disease *per se*; that the term is usually applied to a simple malarial fever which has assumed a continued type; and finally, that the name is unfortunate, as leading to confusion, and tempting, as has been remarked, to carelessness in diagnosis. Typho-malarial fever is a well-sounding phrase, and often convenient to use, but is it strictly scientific?

NEW VIENNA, O.

FOUR ENUCLEATIONS OF THE EYE.

BY IRA A. E. LYONS, M.D.

The present method of enucleation was devised in 1841 by Bonnet and O'Ferral, independent of each other. It was introduced in London in 1851 by Mr. Critchett. The great advantage in this method is removal of the eye from the ocular capsule without any injury to or interference with the cellular tissue of the orbit or a division of the outer commissure of the eyelids. The muscles are divided quite close to their insertion in the sclera, the conjunctiva preserved, and as but few blood-vessels are severed the hemorrhage is but slight, and you have an excellent stump for an artificial eye. Enucleation of the eyeball becomes necessary by the presence of foreign bodies in the eye, or other injuries, by staphyloma, sympathetic irritation,

and other diseases. The following cases are those occurring in my clinic at the Central College of Physicians and Surgeons during the winter term of 1880-81:

CASE I. J. P., physician, age fifty-six. For the last twenty-five years the eyes have been failing, the result of some inflammatory action in the uveal track. The eyes are both staphylomatous. With the right can just see enough to read and go about; but in the left, both quantitative and qualitative perception of vision are lost; the eye was painful and constantly inflamed, which affected the other to a greater or less amount. In hopes of improving sight in the other by relieving it of this constant source of irritation, I practiced enucleation. The ball was found to be increased anterior posteriorly; all the coats attenuated; detachment of retina; the lens opaque and in contact with posterior surface of cornea; the iris completely degenerated and rotten. The cornea was dotted over with opaque spots, the result of former inflammation, between the different layers. The removal has not increased vision any, although he *thinks* he sees better. The ball is not so liable to those "spells of irritation," and the danger of losing "what sight he has" is not so great. The presence of an artificial eye does not cause any sympathetic trouble. The case was undertaken simply to ameliorate, if possible, the present symptoms of irritation and to save the little remaining sight.

CASE II. O. J. R., age thirteen. Was brought on account of a constant discharge from the eye for ten years. Had tried many doctors without any good. The history of the case was this: When three years old fell out of a window and ran a stick into his eye. The doctor removed several splinters, but the eye had been destroyed, and there began a discharge which would not be controlled by local applications. When brought to me the eye presented the following appearances: The ball red and inflamed, cornea hardly distinguishable; could not be moved in any direction, and the movements of the other eyeball were also restricted in consequence. The cornea was turned inward, as in a bad case of squint, except in squint the eye can be turned out-

ward, the other making an associated movement inward; but here the ball remained passive. After seeing the case a couple of times, was convinced there was still a foreign body in the orbit; if not, why this persistent discharge and interference of mobility of eyeball? I discouraged local treatment, and insisted on enucleation, which the boy heartily favored. On December 2, 1880, Professor Eastman administering the chloroform, I proceeded to remove the eyeball. Had no trouble until I came to internal rectus, when I found it impossible to get the muscle on the hook so as to cut it off. My scissors met with some hard substance, and it was not until after I had pulled the ball off of the end of the foreign substance that I was able to finish the operation. In trying to get the muscle on the hook the eye turned outward, at the same time the vitreous escaped, the ball collapsed, which complicated its removal. After the removal and inserting my finger, it met with this resisting substance, which on taking it away proved to be a stick of pine one and a half inches long and one quarter inch in diameter. It had been there ten years.

When the patient fell out of the window the stick struck the ball external to the cornea, and passing through it turned the cornea inward, and thus created apparent cross-eye; but after a couple of days the external rectus acting drew the ball outward, and so left one end of the stick inside of the ball, the other running inward and backward, penetrating the ethmoid cells, and so held the ball just as though a nail had been driven through the ball into the skull, thus transfixing it.

The boy is now attending school and has better use of the other eye. The discharge has ceased. In looking into the socket inward and backward one can see half an inch into the channel that the stick made.

CASE III. Mr. O. K. C., age sixty-five. Blind in right eye, while the other eye gives him so much trouble as to prevent him attending to his usual avocations and reading the daily papers. The history of the case is this: While where his children were playing base-ball the ball struck him in the eye,

causing detachment of retina, with subsequent traumatic cataract and strong tendency to sympathetic irritation. There being no probability of any relief as long as the diseased eye remained, advised enucleation, and on the 20th of January, 1881, did the operation. The patient is now attending to business in entire comfort, and is greatly improved in appearance by an artificial eye.

CASE IV. Mr. C. B., age twenty-three, twelve years ago was struck in the right eye by a bit of a gun-cap, the fragment entering the ball and lodging in the ciliary muscle, there to become encapsulated and remain until the day the eye was removed. The eye was very painful for several weeks after the injury, but it seemed to improve; the pain finally disappeared, but the eye was totally lost, and it never ceased to be a source of trouble and irritation. When I saw him fresh inflammation was setting up and the eye was very painful. There were strong symptoms of sympathetic irritation. Advised enucleation without delay. The operation was performed on January 27, 1881, since which time patient has been free from trouble. The ball was atrophied, and the foreign body was found imbedded in the ciliary muscle.

INDIANAPOLIS.

AN ANEURISM OF FEMORAL ARTERY.

BY W. F. STIRMAN, M.D.,

Assistant Physician to St. Louis City Hospital.

M. K., age twenty-eight, on the 14th day of September, 1879, had a pistol go off in his pocket. The ball, after passing through the ulnar side of palm of left hand, entered the thigh to the inner aspect of its anterior face, just below Poupart's ligament. It ranged downward and outward, and lodged under the skin in the outer and upper part of the popliteal space,

whence it was removed by the patient himself. He lost but little blood, and this from the hand, and missed but two days from work at the time. He continued in his usual health and at work until July 15, 1880, when the foot and thigh, especially the foot, became painful. In the evening the whole limb appeared to be swollen, and grew exceedingly painful during the latter part of the night. The swelling was most marked on inner side of thigh, immediately above knee, and gradually increased. The leg became somewhat flexed on the thigh. Constant pains set in, extending to the foot. General health continued fair.

On admission to hospital November 10, 1880, a tumor larger than a man's head was seen on inner and anterior part of thigh, extending from Poupart's ligament to the knee. The skin covering it was discolored and glossy, being apparently about to break down. Drs. Hodgen, Dean, and others examined the tumor and pronounced it an aneurism of the femoral artery. No pulsation could be either seen or felt. Thrill slight over lower part of swelling. Bruit distinct over whole tumor, and particularly over inner portion of lower third.

Dr. Hodgen operated under five per cent carbolized spray. He commenced the incision three inches below Poupart's ligament, and followed the track of the artery downward a distance of eight inches. A clot of from five to seven liters was turned out, disclosing a wound the size of a crow-quill in the femoral artery just where it enters Hunter's canal. Ligated the artery above and below and divided it. Adherent clots were not removed for fear of causing unnecessary hemorrhage. But a small amount of blood was lost, and most of that came from two subcutaneous veins which were overlooked in the hurry of the operation. Stuffed wound with antiseptic gauze wet with a two-and-a-half-per-cent solution of carbolic acid. On removing dressing twenty-four hours after, a profuse discharge of a sero-purulent fluid mixed with clotted blood escaped. Pulse and respiration good. Slight fever.

November 14th. Vomited twice; felt depressed; slight fever; bowels regular.

Six days after the operation the clots had all detached and the cavity was filling up with healthy granulations. Some fever still present. The temperature of the limb rose to the normal fourteen hours after the operation. The leg continued a little edematous and the foot painful. Antiseptic dressings were continued, always being applied under the spray. After the first few days the discharge was never profuse, and, owing to the carbolized dressings, but moderately offensive. The wound filled up rapidly, the general health improved, and on January 30, 1881, he was discharged from the hospital "well."

This case illustrates well the beneficence of carbolized dressings. When we take into consideration the extent of the wound, the fact of the fever never having been high, the non-disturbance (with the exception of one day) of alimentation, and the rapidity of the cure, it is to my mind a most remarkable case, the good features of which I can but attribute principally to Listerism."

ST. LOUIS, MO.

TWO CASES OF COMPLICATED FRACTURE OF THE HUMERUS WITHOUT ANCHYLOSIS.

BY GEO. N. MONETTE, M.D.

I saw shortly after the accident a young man who had, as the result of direct violence, received a fracture of the humerus involving the internal condyle, olecranon cavity, and separated the internal condyle from the shaft of the bone. Shortly afterward I met with a case identically similar as to the seat of the fracture, due to a fall from some height. The tumefaction was very great in both cases. The two were treated in the same way, viz. continued applications of a lotion of hydrochlorate of ammonia (half ounce to one pint water) until the tumefaction had subsided—which was in ten days, when the parts were put

in plaster bandages. On removal of the dressings no ankylosis nor any complication of the joints existed, save an awkward inability to flex the arm readily, which passive motion soon obviated. In one of the cases subsequent to discharge there developed a species of deformity which evidently was due to an excessive amount of *callus* in the olecranonoid cavity, causing some impediment to extreme flexion of the arm.

NEW ORLEANS.

FOREIGN CORRESPONDENCE.

My Dear Vandell:

LONDON, May 15, 1881.

The piercing northeast wind to which I bitterly alluded in my last letter is no doubt responsible to a great extent for the irreparable loss the British nation has sustained by the death of Lord Beaconsfield. Shortly after I dispatched my letter the weather became milder, and almost immediately the bronchial symptoms became less urgent, the patient was able to take and digest nourishment freely, and it began to seem as if the crisis was past. But the wind backed again to the northeast, and within a few hours the bulletins announced a relapse from which he never rallied. In a purely medical letter like this, a word of criticism as to his policy and aims would be completely out of place; besides, the daily press has repeated on this subject every hackneyed phrase and claptrap sentiment more than *usque ad nauseam*. Many years hence we shall be better able to judge of his policy; and whatever be the judgment passed, his name will undoubtedly always rank among those of the greatest of our statesmen.

The flat refusal of Sir W. Jenner to meet Dr. Kidd in consultation on his lordship's case has raised a storm of controversy which will subside as such controversies usually do, leav-

ing every one with precisely the same opinions they had at first. As to Dr. Quain, *laudatur ab his, culpatur ab illis*; and by *illis* I mean particularly the College of Physicians. With that learned corporation it is understood Dr. Quain's position is seriously damaged. So strong was the feeling against him among the fellows of the college that I hear, on excellent authority, at the ballot the other day for the election of a president one of the papers taken out of the ballot-box was found to bear the name of "Professor Ambidexter." Before the ballot a meeting was held, at which Dr. Quain tried to justify the course he had taken before the fellows, and after him Sir William Jenner spoke in explanation of his refusal to meet Dr. Kidd on any terms. "If Dr. Quain was right," said Sir William, "then I am wrong and deserve the censure of the college." The answer to these words was given in the ballot that followed, when Sir William Jenner was almost unanimously chosen as president. To me indeed it seems that Dr. Quain has been somewhat hardly used. Before he decided on going to see Lord Beaconsfield he took the advice of the most eminent and respected members of the profession, Sir James Paget and Sir Thomas Watson, and with their approval he undertook the case. It can not be held for an instant that he met Dr. Kidd in *consultation*. In a letter written to Dr. Quain Dr. Kidd's own words are, "Every prescription and order of yours shall be faithfully carried out by me." This is not much like a consultation. Moreover, Dr. Quain at once appointed his own lieutenant, Dr. Bruce, and installed him at the house in close attendance on the patient; so that Dr. Kidd's position was purely nominal. Under these circumstances I think not a few of the profession will hesitate before they condemn the course of action taken by Dr. Quain, while with the laity undoubtedly he has gained immensely in popularity and Sir William Jenner has somewhat lost ground.

Next to the death of Lord Beaconsfield the topic of the hour is the smallpox outbreak. It is useless to try and deny any longer the fact that we are face to face with a most serious epidemic. The number of fatal cases has been steadily increasing

during the past few weeks, and rose last week to eighty-four. The few hospitals that we have available for the reception of smallpox cases are full to overflowing, and when the disease once gets hold of the teeming courts and alleys it will be very difficult indeed to arrest its progress. Absolutely nothing in the way of prevention is being done by any of the numerous vestries and boards appointed for the waste of public time and money. It is said that government has in contemplation a bill to deal with the question of smallpox hospitals, but it seems likely that before government has finished "contemplating" the time for prevention will be past and a panic will have set in. In the south of London, where the epidemic is really most serious, it is a monstrous thing that children whose families are now suffering from the disease should be compelled to attend the public schools. Such blind folly is almost incredible, but it is, alas! true. Happily vaccination and revaccination are going on vigorously, so vigorously indeed that there is quite a lymph famine; and I have heard of several practitioners who have paid five shillings for a single tube of the precious fluid. An office has been started where the public may be vaccinated from the calf direct, and from what I hear the arrangements seem to be very good and careful. It is a private venture, and the profits are said to be very large. Of vaccination with calf lymph I have scarcely any experience, but as today or tomorrow I intend to be revaccinated, together with all my family, I shall in my next letter be able to report upon the result in several cases. However, the results of revaccination must necessarily vary considerably.

I have referred more than once to the treatment of locomotor ataxy and other diseases by nerve-stretching, cases of which have been detailed in the various medical journals. For some weeks past these reports have ceased to appear, and I have heard rumors that the results of such treatment after all are not quite so favorable as they at first appeared. Indeed I heard yesterday of a case in a west-end hospital of locomotor ataxy treated by stretching the sciatic nerve in which it had taken six weeks

to heal the incision, and the general symptoms seemed to have been much aggravated by the operation. I shall take every opportunity to ascertain the effects of this procedure in other cases. It was in Germany that this line of treatment was first adopted, and it is not very probable it will ever make much progress in this country. Germany possesses some of the most distinguished surgeons of the age, but also it is a country which has always been prominent for startling novelties in medical and surgical treatment, and the tendency in this direction seems to be increasing. One reads of the most unheard-of operations. Some obscure forms of spinal disease have been treated by *stretching the optic nerve*. The results are not mentioned, but they can, I think, be imagined without much difficulty. Scarcely less extraordinary are Professor Billroth's resections of the stomach of which three cases were brought forward at the late German Surgical Congress. Indeed the aim of modern German surgery appears to be to ascertain precisely with how much of its anatomy the human frame is capable of dispensing without too much disturbing that state of equilibrium called life.

An interesting therapeutical fact has just been referred to by M. Cornil, of Paris, in the *Revue de Therapeutique*. He states that when cantharides is applied to the skin of a rabbit, as by a blister, poisoning is produced, characterized by cystitis, nephritis, and inflammatory lesions in the liver and lungs. If the cantharides is injected, in twenty minutes after the operation great changes are found in the cavity of a glomerulus of the kidney. Abundant leucocytes are found between the envelope of Müller's capsule and the vascular bundle which composes the malpighian glomerule; besides this a granular exudation is found in the uriniferous tubes which fills and obliterates their caliber. In fact a true catarrh of these tubes is brought about. In the bladder the disturbances are nearly of the same kind, but the lesions are superficial, the irritating principle of the cantharides has acted directly on the internal surface of that organ. In the lung the small bronchial tubes are filled with white corpuscles; these lesions which indicate inflammation of the mucous

membrane are found in all the parenchyma, and are the consequence of the irritating principle, the cantharides, carried into all the organs by the circulation. If a blister be left on sufficiently long the same lesions are obtained. M. Cornil therefore thinks that large blisters applied to the chest and left on from fifteen to twenty hours are more injurious than useful. Not only are sytitis and nephritis brought on, but inflammation of the bronchi and of the pulmonary parenchyma itself. He has thus arrived at the conclusion that in order that blisters should not be injurious they should not be allowed to remain on more than from three to four hours. Only a few weeks ago I met with a case exactly illustrating this very point. A little girl of three years old was brought to me suffering from slight hematuria, the urine being, however, only very faintly tinged with pink. There was a constant dribbling of urine which sopped the child's clothes. She was extremely restless, had lost flesh, and appeared to be rapidly getting into an extremely low condition. About three weeks before she had been ordered to have a piece of plaster (*Emplastrum calefaciens*, B. P.) applied over the chest, as she was suffering from slight chronic bronchitis. The medical man who was attending her and had ordered it had neglected to see that it was removed after a day or so, and these symptoms of incipient cantharides poisoning were the result. The removal of the plaster was followed by the immediate cessation of the hematuria and in three days the child was perfectly well. My own feeling is that the actual cautery is much neglected here in England. A single application of it is often sufficient to do thoroughly what constant applications of cantharides will not effect, and though the name of the instrument is calculated to inspire alarm, the feeling is quite groundless. Of its effect in cases of chronic synovitis I can not speak too highly.

As the time of meeting approaches the evidence of general interest in the International Medical Congress becomes increasingly apparent. In several of the sections the number of communications already promised is large enough to fill up the entire time likely to be at their disposal, and these are by

contributors whose high scientific character is sufficient guarantee for the merit of their intended papers. The choice of the Executive Committee of a representative of French medical science to give the fourth of the general addresses has fallen upon Dr. Maurice Raynard, a distinguished physician and an accomplished orator, the author of *Le Medecin au Temps de Molière*, as well as more strictly scientific works of high merit. In Paris a lively interest is taken in all that pertains to the Congress by a large number of the hospital physicians and surgeons, and a number of medical men from the provincial French towns and schools have signified their intention to be present. Cordial notices continue to appear in the foreign medical journals, and a highly complimentary one in the *Berliner Medicinische Wochenschrift* is particularly worthy of notice. The editor, Dr. Waldenburg, says that the Executive Committee are making the most strenuous efforts to render the meeting by far the most comprehensive and magnificent medical congress held up to this time, and to obviate the objections which are often and justly to be made against international meetings. He especially points out the comprehensive and practical nature of the programme which he thinks should give the most general satisfaction. The Empress of Germany herself, who, as is well known, lends the weight of her high position as well as her own personal activity to all projects for the alleviation of the sufferings of the sick and wounded, whether in peace or in war, has sent a letter in which she expresses her lively interest in the Congress, and her intention to delegate the distinguished director of the Augusta Hospital in Berlin (her special charge), Professor Keister, to represent her at the Congress. The College of Surgeons have decided to give a *conversazione* in the Hunterian Museum on Friday, August 5, and the preparations that are being made both in respect to public and to private hospitality will not be unworthy of so great an occasion.

Reviews.

A Treatise on Bright's Disease and Diabetes, WITH SPECIAL REFERENCE TO PATHOLOGY AND THERAPEUTICS. By JAMES TYSON, A.M., M.D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania. With illustrations. Philadelphia: Lindsay & Blakiston. 1881. 8vo. Pp. 312.

- Dr. Tyson in his preface thinks an apology may be necessary for having written the above book; but when one takes into consideration the fact that the author's studies and practical work have all been devoted to this special branch of medicine for the past fifteen years, it will appear that an apology is superfluous. In this work there are many things that are in his valuable little book, "Practical Examination of the Urine," and a great many things that are not. Two hundred and nineteen pages, divided into eleven sections, are devoted to Bright's disease. Probably the most important section is the first, in which is given a most lucid description of the structure of the kidney. Section 2 gives the tests for albumen, the ordinary and extraordinary tests; section 3 treats of tube-casts and their clinical significance; section 4 is a short chapter on the classification of Bright's disease; and sections 5, 6, 7, and 8 treat of the etiology, morbid anatomy, symptoms, complications, diagnosis, prognosis, and treatment of the several forms of nephritis. Section 9 is on retinitis in Bright's disease, by Wm. F. Norris, M.D., Clinical Professor of Ophthalmology in the University of Pennsylvania. Section 10, on suppurative interstitial nephritis, and section 11, on passive congestion of the kidney, close the subject of Bright's disease. The remaining eighty-three pages are devoted to diabetes mellitus and diabetes insipidus. In regard to that vexed question, the pathology of diabetes mellitus, Dr. Tyson gives the opinions of the highest authorities, and then admits that the collection of facts upon the subject is somewhat chaotic. He

believes, however, that injuries to the nervous system, especially in the medulla oblongata, and tumors in the same region, may cause an active hyperemia of the liver which results in glycosuria. Again, glycosuria is caused by malassimilation dependent upon derangement of the digestive organs, which include the liver. The treatment is dietetic, hygienic, and medicinal. The first drug the author uses is ergot, because he has been able to trace to it results more directly than to any other remedy. Opium, iodide and bromide of potassium, and strychnia are also recommended; but with the wisest treatment it must be admitted that rarely do cases recover.

The book has a convenient index, is well printed, and merits a place on the shelf of the progressive physician. A. M.

The Hygiene and Treatment of Catarrh. Part I. Hygiene and Sanative Measures. Part II. Therapeutic Measures. With forty illustrations. By THOMAS F. RUMBOLD, M.D. St. Louis: Geo. O. Rumbold & Co. 1881. 12mo. Pp. 473.

Part I of this book was issued as a separate book a few months since and reviewed in the May number of the AMERICAN PRACTITIONER.

In regard to therapeutic measures, a *sine qua non* is, first, cleansing of the passages; and for this purpose the spray-producer is of most utility. To the spray-producer Dr. R. attaches tubes of his own invention, of different lengths and angles, so as to throw the cleansing and medicated spray to every part of the nares, pharynx, and larynx. One of the most useful instruments devised by the author is the hinged pharyngeal mirror, by pressure upon the handle of which the mirror can be rotated or any desired inclination given. Among the rare symptoms of nasal and pharyngo-nasal catarrh are mentioned pain in the top of the head, pain and numbness in arms, the fingers, and the back of the neck, dyspepsia, and palpitation

of the heart. When there is considerable discharge from the nasal passages they are cleansed by the spray-producer with the following solution :

R Carbolic acid, gr. j ;
 Glycerin, $\bar{3}$ ij;
 Water, $\bar{3}$ ij.

After the passages are *clean*, a small quantity of vaseline is melted in the bowl of the spray-producer, and two to five drops of the *pinus canadensis* mixture added. The mixture consists of

R *Pinus canadensis*, gr. xv;
 Glycerinæ, $\bar{3}$ ss;
 Acidi carbol., gr. ss;
 Aquæ ferr., $\bar{3}$ jss.
 Ft. sol.

This is applied by the spray to every part. With respect to elongation of the uvula, the writer doubts if it is ever the cause of a tickling cough, and so questions the propriety of excision of the uvula. The last fifty-six pages are devoted to reports of cases. It is remarkable that Dr. Rumbold recommends scarcely any remedy as a local application except the *pinus canadensis* mixture. In part first it is stated that a bath once in one or two weeks in summer and once in four to eight weeks in winter is often enough. The author must have been reading John Hay's *Castilian Days* when he wrote this, in which book it is stated that in Spain it used to be taught that water was never to be applied externally except in baptism, and further states that at a great social gathering the richest, most accomplished, and beautiful *senoritas* would have streaks of dirt encircling their necks.

There is much in the book that is worth remembering, the first part being of the popular style. The presswork and binding are very inferior, and capitals incorrectly used often mar the appearance of the pages.

A. M.

Clinic of the Month.

ACUTE PRIMARY SYNOVITIS OF THE HIP.—Dr. V. P. Gibney, of the Hospital for the Ruptured and Crippled, reports (New York Medical Journal) the following cases, to call the attention of those who are in general practice to a disease which he believes must occur with more frequency than we should naturally suppose. There are cases of so-called hip-disease, running a comparatively brief course and occurring in children from eight or ten to fifteen years of age, the history of which would indicate that nothing more than the synovial membrane was ever the seat of lesion. The patients between the ages of two and seven years who come under our observation for joint-disease as a rule have a primary lesion in the bone—a chronic central osteitis of the epiphysis—and the synovial membrane is not involved until a late period in the disease.

The history of an osteitis is different from that of a synovitis. In the one we have an almost imperceptible beginning; in the other the invasion is acute and well defined. The signs on examination too differ materially. In the early stages of an osteitis we get no joint-tenderness, and the pain is not acute enough to prevent the child from walking. In synovitis the joint-tenderness is very marked, and the patient after the first twenty-four hours is unable to walk during the first and second weeks. The one disease is, as a rule, chronic; the other is acute. One extends over a period varying from two to five years; the other over a period varying from four to ten weeks.

It is difficult to formulate symptoms—symptoms that are pathognomonic. One must examine the case with care, testing the functions and sensitiveness of the joint thoroughly, employing such means as may suggest themselves. He must remember that if the joint be tender he should get referred pain in the obturator whenever the joint surfaces are approximated. There

should be no infiltration in the periarticular tissues. Sometimes one can perceive an elastic fullness about the trochanter or below the groin, if there be much distension of the capsular ligament. Then there must be a history of acute pain and great tenderness. The history will be very clear, the mother being able to name the day and the hour frequently when the first attack of pain was experienced. A diagnosis can often be reached by exclusion.

As to prognosis, he does not know of any cases that have not made a good recovery. The function of the joint is restored, and no one can tell from the gait that any joint-lesion has ever existed.

The treatment has been very simple; namely, *rest* and *counter-irritation*.

CASE I. Maggie M., aged nine. The hygienic surroundings had been poor, yet the child had been in good health up to the invasion of the present disease, the first symptoms of which appeared on the morning of September 12, 1879, without any assignable cause, unless perhaps exposure to cold may be regarded as a cause. The girl walked a little lame that morning, favoring the left side, and referring the pain to the knee; was not very lame, and indeed rested very well that night; but the next morning, the 13th, she was unable to walk at all, so tender the joint and so acute the pain. In the afternoon fever came on and persisted throughout the entire night. She suffered very much every day and every night until the day of her admission, September 19th. While asleep the limb was flexed at the hip and at the knee. The pain had been paroxysmal, and had been referred always to the groin, the inner side of the thigh, and the knee. The appetite had been good and the bowels regular. Considerable difficulty was experienced in preparing her for examination.

While the patient was quite anemic, the muscular system was fairly developed. As she stood, the right limb bore the weight, while the left was slightly flexed at the knee, the foot being everted. She was able to walk a short distance in the room, yet the lameness was very marked. Firm pressure over the trochanter in the line of the axis of the neck of the bone caused acute pain, which was referred to the inner side of the thigh and knee. Percussion of the flexed knee in the axis of the femur did not produce pain. There was no tenderness on firm pressure in the groin or in the iliac region or in the ilio-costal

space. There was no infiltration or swelling in any of the localities just enumerated. The nates on the left side was broadened, though there was no infiltration here. The superficial inguinal glands were slightly enlarged on both sides. The thigh could not be extended beyond 150° without tilting the pelvis; it could be flexed to 90° , though she complained of pain in the groin when it was forced beyond this angle. Abduction and adduction could be made over one half the normal arcs. Pulse 160; rectal temperature 101.5° F. A blister was applied over the gluteal region the night of her admission, and cod-liver oil and iron mixtures were administered.

September 28th. Most decided relief since admission: She is now free from pain, and walks quite easily, only a slight halt being perceptible. No tenderness in or about the joint. Another blister was applied on the evening of the 30th, and on October 17th it was recorded that she had grown comparatively stout and walked without an appreciable limp. The only change observed in the nates was, that the supra-trochanteric dimple was a little shallower than that on the right side. The limbs were equal in size, and movements at the joint were perfect and painless. Pressure over the trochanter in the direction of the joint gave no pain; concussion gave none. The cure was complete.

October 24th. Submitted to a thorough examination, and the supra-trochanteric dimple found normal. No sign or symptom of disease. Discharged this date, the parents promising to report on the first sign of any relapse. At the present writing—March 1, 1881—she has not returned.

CASE II. K., aged twelve years, admitted to hospital October 3, 1879, was a well-developed, muscular-looking lad. There was a history of phthisis on both sides of the family, and the father was reported to be suffering at the time from sciatica. Had been in excellent health until one month before, when he was seized with pain on the inner side of his right thigh. He had been in bathing quite frequently during the latter part of the summer—three or four times a day—and it was to exposure or fatigue that his pain was attributed. He was able to walk around the first day, although he was decidedly lame. On the third day he took to bed, so tender had the parts in and about the hip become. There was considerable febrile disturbance, without constipation, and morphia had to be administered every night to allay the pain. The hip and the knee alternately had been the seat of pain, and the limb had been with difficulty moved at all. Recently he had suffered most in the distribution of that branch of the obturator which supplies the knee. He held the thigh acutely flexed while lying in bed. He was taken from his bed this morning and brought into the hospital.

Is able to stand, although the weight is borne on the left limb, while the right is a little advanced, the foot being everted. He remarks that this is the first time he has been able to set his foot squarely on the floor since the beginning of his illness. As he attempts to turn he does so by means of the left foot. Can walk only when well supported on each side. His face is indicative of great suffering. The thorax and spinal column are examined with negative results. There is much width to the nates on the right side; the fold is obliterated. No tenderness over sacro-iliac junction, and none elicited on crowding the alæ of the pelvis together. No infiltration in the groin or in the nates; no tenderness here on handling the parts. The superficial inguinal glands are a little enlarged. Light pressure in the groin or over the trochanter gives rise to no pain; no pain on pressure along the shaft of the femur. If firm pressure be made over the trochanter in the line of the neck of the bone he winces quite markedly, and refers the pain to the outer aspect of the thigh and about the knee. Concussion of the joint gives rise to much pain. No dullness or tenderness in either the iliac fossa or the ilio-costal space. The limbs are equal in size, with the exception of their upper thirds, where the right one is one inch larger than the left. This may be due to the influence of two fly-blisters on the inner side of the thigh, cicatrices of which now remain. These were applied by order of the physician at his home. He can not be induced to flex the thigh beyond 135° , nor will he permit extension beyond 160° . Abduction, adduction, and rotation are quite impossible, so marked is the reflex muscular action when these movements are attempted. The rectal temperature is 102.5° . Diagnosis, acute synovitis of the hip. Large fly-blister is applied over the trochanteric region.

October 5th, two days after admission, he is walking without support, and the improvement is at least fifty per cent. The blistered surface is being poulticed every six hours.

October 15th. This surface has healed, and the contour of the nates is nearly restored. He walks with much facility, limping very little. No joint-tenderness can be elicited. Deemed expedient, however, to follow up the blistering, and another is applied this evening in the same region.

November 3. Last blistered surface has been a long time healing; many superficial ulcers remain at site of blister. For the past few days he has been walking with a mere trace of a limp; had no pain until last night, when by accident another patient ran against him, striking the gluteal region with the wheel of a rolling chair with considerable force; consequently he is very lame this morning, and the

soft parts, the inguinal glands especially, are infiltrated to a great extent. No joint-tenderness can be found, however, by the different tests, and the pain and tenderness are thus proved to be periarticular. It would seem then that the contusion has simply aggravated the periartritic infiltration resulting from the second vesication, without injuring the joint. He is put to bed for a few days and the poultices are renewed.

December 13th. The ulcers have been most obstinate, and the periarthrititis of our own making has given him much more trouble than did the synovitis after his admission to the hospital. They (the ulcers) have finally a scab over each. A few days ago the boy was submitted to a thorough examination regarding joint-functions, and these were found perfectly restored.

January 12, 1880. Discharged cured. General health excellent.

October 31st. The father writes, in response to a letter of inquiry, that there has been no sign of any relapse, and that the boy is still free from pain and lameness.

THE VALUE OF PAIN AS A SYMPTOM OF EAR-DISEASE.—Mr. Field, the very excellent aural surgeon to St. Mary's Hospital, London, reports a series of cases of disease of the ear accompanied by pain, and remarks as follows :

Cases of ear-disease may be conveniently divided for clinical purposes into two great groups, namely, those of persons who seek advice for pain in or about the ear (as well as for discharge from the ear without pain), and of persons who complain of loss of hearing, including those with tinnitus and vertigo. In the present paper it is with the first group that we are more particularly concerned.

Those cases having pain for their prominent symptom may be divided for practical purposes into two classes: first, those in which the disease is in the outer ear, or external meatus, and is due to the presence of foreign bodies, as wax, or to otitis externa, either of a phlegmonous or dermoid nature; and secondly, those in which the disease is in the middle ear, and may be either of a catarrhal or of a more serious type. The first class of cases may be generally recognized with tolerable ease by a superficial examination or by use of the speculum. With an account of these I need not trouble my readers further than to say that in all instances of pain in or about the ear it is most necessary that a correct answer be given to the question whether the pain arises from an affection of the meatus. This answer must not

be based upon a mere guess or supposition ; it can and must be established by accurate and satisfactory observation ; and upon this the life of the patient may depend. A decision having been satisfactorily arrived at if the disease be located in the middle ear, it now remains to consider its nature ; and this brings me to the more especial subject of the present paper. Speaking roughly, the second class of cases may again be divided into three groups : first, those in which there is pain, more or less severe, but without much constitutional disturbance ; secondly, those in which the pain is associated with other and graver symptoms ; thirdly, perhaps I should add, cases in which there is no complaint of pain but in which a discharge exists. In the first group the inflammation of the middle ear is merely catarrhal ; the pain is unaccompanied by any marked rise of temperature and is not of an intense and throbbing character ; there is neither vomiting nor convulsions nor any external swelling about the ear or mastoid process. Such cases as these depend generally upon cold or a disordered stomach, and sometimes upon gout or other constitutional affections. Their treatment is simple and the prognosis good, for they very commonly do not pass on to suppuration. The second group of cases is much more serious. The constitutional symptoms are very severe ; intense throbbing pain in the ear is accompanied and often disguised by the headache of inflammatory fever, hence the nature of the disease may be overlooked. With these symptoms there may be vomiting, high fever, delirium, and even convulsions. The pulse may be frequent or slow and deliberate, having the character of the "cerebral pulse ;" in fact the attack may very closely simulate meningitis, a disease in which it is not unlikely to terminate. In these cases we have to deal with an inflammation, not of the mucous membrane only, but also of the connective tissues of the periosteum, and hence often of the bone itself. The thin walls of the cavity separate it above from the brain and its membranes, below from the jugular vein, and behind from the mastoid cells ; in front it has an outlet by the eustachian tube ; on its inner wall is the delicate internal ear, and on its outer the tympanic membrane. The result will therefore depend on the side suffering most from the attack ; thus it may terminate in meningitis, or cerebral abscess, in phlebitis and pyemia, in disease of the mastoid cells, in resolution through the eustachian tube, in total destruction of the organ of hearing by attacking the internal ear, or by temporary or permanent interference with hearing, consequent on injury to the tympanic membrane. To combat the disease our treatment must be correspondingly active ; sharp antiphlogistic remedies and leeching as free as the cases indicate will be always necessary, while the surgeon must be ready to

cut deeply down upon the mastoid process should there be edema there, or to puncture the membrane if it is found bulging.

The cases I have narrated are nearly all examples of otitis interna, and such cases are very liable to simulate cerebral disease where it does not really exist, and if left to themselves they are very liable to produce it. All the symptoms of meningitis may be present in a case of otitis interna and that yet the case may recover. Similar symptoms with a like result arise occasionally from suppuration in the eyeball or orbital cavity. Whether in these cases meningitis really occurs and subsides, or whether symptoms of meningeal inflammation are produced by mere hyperemia, it is difficult to determine; the knowledge of their existence should make our prognosis guarded when we suspect meningitis from ear-disease. Such cases are on the one hand hopeful, because by treating the ear-disease we may be able to cure the patient; but on the other hand they may be most grave, for intracranial mischief may have arisen against which we shall be powerless. There can be no doubt, as I have already remarked, that many cases of obscure cerebral symptoms in children, some of which end in meningitis, are due to otitis interna. In all those cases commonly grouped under cerebral irritation or suspected meningitis, the ear should be examined with a speculum, the use of which should be as much a matter of routine as that of the ophthalmoscope. Should the membrane be found bulging it will probably require incision; but this operation of course must not be rashly undertaken since it requires both experience and skill.

The other treatment necessary should disease of the ear be detected has already been described. It is certain that the lives of many children might be saved were the practice more generally followed; for not a few die annually from acute otitis interna and its immediate results. The treatment of the chronic discharge from the ear which follows this disease in most children who survive it would prevent those most painful cases of suppurative meningitis, cerebral abscess, and pyemia so common in adults—the miserable results of neglected ear-disease in childhood. The want of familiarity with the ear-speculum shown by many medical men is remarkable, especially when we consider that cases of tinnitus, neuralgia, headache, vertigo, epilepsy, cerebral irritation, brain-disease, and pyemia, due to ear-disease, frequently come under their observation. Unfortunately a large proportion of these affections pass unrecognized.

Pain which has its origin in the ear is by no means localized in that organ. It may be either in front, above, behind, or below it; indeed any where on the same side of the head and perhaps on each.

The reason for this is easily discovered. The external, middle, and internal ear have all very far-reaching nerve connections. Thus in front of and above the external ear are ramifications of the auriculo-temporal branch of the third division of the fifth; behind, above, and below are the small occipital and great auricular branches of the cervical plexus; immediately behind the pinna the auricular branch of the pneumogastric comes to the surface and gives rise to very important communications; all these nerves anastomose in and around the pinna. In the tympanic cavity we find an equally wide-reaching plexus whose connections are as follows: the tympanic branch (Jacobson's nerve) from the petrous ganglion of the glosso-pharyngeal communicates with the great superficial petrosal which passes to the sphenopalatine ganglion; its small superficial petrosal twig goes to the otic ganglion; and a third filament passes to the carotid plexus of the sympathetic. All these nerves are united in the tympanic plexus, and pain produced in the tympanum may radiate over the wide area which they occupy.

NASAL POLYPS.—Dr. W. H. Daly, of Pittsburgh, concludes in the Archives of Laryngology for April, a valuable paper on this subject, with the following:

In operations for the removal of polyps, or the reduction of growths in the retro-nasal region, either by means of the loop, forceps, or galvano-cautery, the tip of the index finger should be held in the vault of the pharynx as a guide. With it there, the operator can adjust the loop, or guide the forceps, and engage the growth within their grasp. He can also place the point of the cautery electrode wherever he wishes it, then, withdrawing the finger into the lower pharynx, out of danger of being burned, close the current as long as it is safe at a time, which should always be brief, with longer intervals to allow cooling.

Then inspect again the parts, and renew the burning, if necessary, until sufficient destruction of the growths or their pedicles has been accomplished.

The operator should employ the index finger of his *left* hand as guide in the *left* side of the patient's pharyngeal vault, instructing the patient to lean a little forward and press against the operator's finger. By this means the patient's head is held firm, and sufficient force can be used to overcome the expulsive action of the levator palati muscles, which soon give way, and the tip of the finger is brought directly to the pharyngeal orifices of the posterior nares, while with the right

hand the loop-handle, the forceps, or the electrode can be guided with certainty into any of the fossæ of the nasal cavity.

In operating in the patient's right naso-pharynx, the index finger of the operator's right hand should be used as the guide in the same manner as detailed above.

This plan gives many advantages in operating, as the index finger in the retro-nasal opening is a certain guide and director, as well as an efficient protection to the eustachian orifices and septum nasi.

I dwell on these points because little is said in the books upon this plan of operating; a trial of it will convince the surgeon of its usefulness.

After removal of polyps the patient should be kept upon treatment, and the nares carefully inspected at intervals of three days at least, and the milder cleansing applications should be daily used by the patient himself. Any regrowths should be at once destroyed and their bases cauterized.

Any of the stronger purgative mineral waters, as the Carlsbad, Hunyadi Janos, or Ofner Rakoczy, are useful during this treatment to allay tendency to inflammatory febrile action.

Nothing less than a relief of the catarrhal condition of the nasal mucous membrane will insure immunity from a return of the growths, and the patient must receive proper medical and local treatment for this purpose

NON-MORTAL FRACTURES OF THE BASE OF THE SKULL.—The base is the most fragile part of the cranial dome, being flatter, thinner, and more brittle, destitute, for the most part, of diploë, its sutures non-serrated, and perforated by foramina and fissures, it is by these anatomical and physical peculiarities much less able to withstand assaults from without than the vault, and fractures are therefore common. According to Dr. John A. Lidell, of New York, who contributes a paper upon this subject to the *American Journal of the Medical Sciences* for April, such fractures are less deadly than is generally considered by surgical writers. One hundred and thirty-seven cases are summarized in this valuable paper, from which it appears, first, that in the late war recovery took place in a large proportion of gunshot fractures involving the base of the skull, and secondly, that fractures in general involving the base of the skull prove mor-

tal much less frequently than has been generally supposed, such injuries are therefore not to be considered as necessarily fatal. In two cases reported by Dr. Lidell, carotid ligation was successfully resorted to for persistent hemorrhage from the middle meningeal artery. Those patients did best who were kept at rest and treated antiphlogistically by low diet, cold to head, purgatives, mercurials, and blisters. Several apparently desperate cases were saved in this way. The therapeutic deduction from this study of the importance of rest and antiphlogistic treatment during the inflammatory and suppurative periods is of great practical value.

A considerable number of the cases of recovery subsequently suffered from various forms of nerve-disorder, such as atrophy, contraction of tendons in paralyzed limbs, headache, vertigo, blindness and deafness, epilepsy, and impairment of the mental faculties, evidently connected with changes of a chronic degenerative character going on at the base of the brain. This ultimate result should not be lost sight of in the prognosis, and also calls for judicious treatment.

OÖPHORECTOMY FOR FIBROID TUMORS OF THE UTERUS.—Dr. G. H. Balleray, of Paterson, N. J., calls attention in the *American Journal of the Medical Sciences* for April to the necessity for oöphorectomy in cases of uterine fibroma attended by profuse hemorrhage before the patient is reduced to such a condition that the operation can only be undertaken as a forlorn hope; the difficulties of the operation should not be ignored, but, on the contrary, a full knowledge of them by the surgeon and an appreciation of the possible dangers by the patient are equally essential in either event. That oöphorectomy is destined to be the operation of the future in cases of bleeding fibroid of the uterus, which has resisted all other treatment, which is not susceptible of removal through the vagina, and in which it is evident that unless the hemorrhage is arrested the patient must inevitably perish, can hardly admit of a doubt. The cessation of activity of such growths after the menopause

is a subject of common knowledge, and the premature induction of the menopause by the removal of the ovaries in some cases holds out the only prospect of recovery. The rule should be, if without an operation the patient *must* die, and if an operation holds out any hope of success, however slight, and if the patient, understanding the facts of the case, elect the operation, it is the duty of the surgeon to perform it.

NON-MALIGNANT ULCERATION OF THE RECTUM AND ANUS.—Dr. Charles B. Kelsey, Surgeon to the Infirmary for Diseases of the Rectum, New York, contributes a paper upon the different forms of non-malignant ulcerative disease of the ano-rectal region, classifying the ulcers according to their etiology into simple, tubercular, scrofulous, dysenteric, venereal, those due to stricture, and those due to the gangrene following the severe fevers. The importance of a thorough examination with a duck-bill speculum under ether is so obvious that it is a matter of surprise that this manipulation, furnishing the only means of exact diagnosis, is so commonly neglected by physicians. In the majority of cases the existence of an ulcer being ascertained, provided that syphilis be excluded, the ulcers in the rectum proper will belong to the first or simple variety of the disease, and will yield to local applications of bismuth, iodoform, or solution of nitrate of silver. He lays particular stress upon the absolute necessity of perfect rest and fluid diet, without which, he says, no treatment will be of much avail. To them, however, he adds other remedies in the way of general medication and local applications. (*Ibid.*)

Notes and Queries.

THE AMERICAN MEDICAL ASSOCIATION.—The Association met in its thirty-second annual session at 11 o'clock A.M. in Richmond, Va., Tuesday, May 3, 1881. We have only space for a portion of the more practical part of the work of the Association. The following condensed extracts from the proceedings will be read with interest by all practitioners:

Dr. John T. Hodgen, of St. Louis, the president of the Association, delivered the annual address. He divided surgeons into those seeking to perform every practicable operation and the other avoiding operations whenever it is possible. The former include the bold, the enterprising, the ambitious, and the reckless of our profession; the other the timid, the conservative, the cautious, and the procrastinating. The former class is largely made up of young men, enthusiastic and full of inspiration, caught from professors whose task is to make the way clear and easy—students of the current medical literature, which teems with new suggestions and is crowded with reports of remarkable cases and wonderful operations, generally ending or reported as ending happily to the patient and to the great credit of the reporter. Simon excises a kidney, turns an aberrant ureter into the rectum, touches through the natural passages a stone in the kidney, and immediately hundreds of ambitious surgeons are seeking kidneys to excise, ureters to turn, and renal calculi to touch. Battey removes an ovary for the relief of an obscure nervous disorder, and forthwith ovaries are removed for almost every imaginable nervous disorder. Billroth cuts out a cancerous larynx or a diseased pylorus, and at once a demand springs up for similar cases, and the daring operations are repeated in all the four quarters of the globe. The second class is recruited largely from the first, and often only after many lessons of bitter disappointment drawn from the experience of many and grave disasters.

The practice of seeking cases for operation and of operating by blindly following the dicta of authority, without a full understanding of the condition to be relieved, is well illustrated by two surgical procedures which have been resorted to with far too great frequency, as

I believe, by gynecologists during the past and present decades. Of one of these procedures, the division of the cervix uteri for flexures—an operation without proper foundation in pathology, which was generally useless and often dangerous, and which always entailed deformity—Emmet holds the following energetic language: “Since the practice of indiscriminate division of the cervix was first introduced by Professor Simpson, more malpractice has been perpetrated throughout the world in the name of this simple operation than from any other procedure known to the profession.” So, too, great wrong has been done in seeking to follow the lead of Dr. Emmet in the performance of operations for the cure of lacerations of the cervix uteri. From the large number of operations reported by many practitioners it may be fairly concluded that it has often been needlessly and unprofitably performed.

A simple knowledge, however accurate, of the parts involved does not qualify one to make an intelligent prognosis, to decide upon the advisability of an operation or treat judiciously even such diseases as consist mainly in pathological changes in the part in question, to say nothing of the many cases in which subjective symptoms are referred to a particular part when they are in fact but the local expression of some remote or possibly constitutional trouble. Herein lies a danger which threatens the profession, through the adoption of exclusive specialties by those not well trained in general medicine. It can not be denied that the early and exclusive study of the affections of a part tends to narrow the intellectual grasp and cramp the powers of the man who yields to the influences incident to such partial training. In the best sense, a specialist is a physician and something more; in the worst, he is something else and something less than a physician.

The rapid progress made of late years in the precision and perfection of regional surgery, the brilliant triumphs secured, and the almost unlimited possibilities attained, combined to tempt surgeons to reckless operative procedures. Captivated by the knowledge that almost every region of the body has been and therefore may be invaded without necessarily destroying life, we are in danger of overlooking the general influences which are ever present to modify and control the results of local injuries. The local conditions calling for surgical operations are besides more easily studied by the young surgeons than the general conditions which may forbid them, and are more fully discussed in the text-books and college lectures. To learn what to do and how to do it, is always more attractive to the student than to be told what not to do. And this is especially true if the thing not to be done is something which he believes he can do well.

On the other hand, we recognize certain diseases and conditions in which, however defective our knowledge may be in some respects, we are at least certain that very early operation is indicated, both as involving a minimum of risk and as offering the best or perhaps only chance of saving life or of averting great calamity. In this class we include tumors, benign or quasi-malignant. The propriety of the early removal of quasi-malignant tumors is nowhere better illustrated than in the case of sarcoma of the choroid—a disease which, by the aid of the ophthalmoscope, can now be positively and accurately diagnosticated at a very early stage of development. Left to itself for a few months, it will surely break through the outer coat of the eyeball, and soon develop into a fatal and hideous tumor of the orbit, complicated probably with sarcomatous deposits in distant parts. Removed at an early stage by enucleation of the eyeball, it may never return *in situ*, and life may be indefinitely prolonged.

In rodent cancer and in epithelioma we now expect a cure by excision, provided it is done early enough; and even in mammary scirrhous removal of the breast has exceptionally effected a permanent cure. Sympathetic ophthalmia affords a striking instance, which may result either from not recognizing a danger in season or from a want of promptness in dealing with it.

Scarcely any fact is better established than that a high condition of health is not the condition which best fits the patient to bear the forced confinement, the impaired digestion, the imperfect assimilation, and the perverted excretion which follow any serious bodily injury or grave surgical operation. In such patients we have learned to dread surgical fever and active inflammatory complications, leading possibly to septicemia, and ending, it may be, in death. So, too, that standard of health marked by an unusual ability to bear continuous mental strain, taxing the digestive and assimilative organs to their utmost, is not that under which the effects of shock are best borne, whether it be the shock of a severe injury or of a capital operation.

On the other hand, a man whose life is not marked by excessive tissue-change, whose digestive, assimilative, and excretory organs are not unduly taxed, and whose nervous system is not attuned to conditions of intense mental strain, is likely to bear well the shock of injury and the nutritive changes incident to prolonged confinement. Again, the chronic sufferer whose nutritive and excretory organs have become educated, so to speak, to make good the excessive waste incident to any continuous drain is often much better fitted to endure a grave surgical operation than is the new recruit of the army of sufferers. Very often the surgeon is compelled to act in the presence of morbid condi-

tions of the most complex character. Thus in strumous manifestations in connection with chronic suppurative disease of the joints and bones the profuse discharge makes the most exacting demands upon the nutritive functions, while the close confinement, pain, and loss of sleep combine to destroy the appetite and impair digestion and assimilation. In such a condition (so clearly set forth in the case of hip-disease by our distinguished ex-president, Dr. Sayre) we recognize in the cachexia the effect rather than the cause of the local trouble, and by resection or amputation of the offending limb we may arrest the exhausting discharge and restore the disturbed balances between the processes of nutrition and waste.

The dangers in certain depraved conditions of the body from injudiciously delaying an operation are forcibly depicted by Robert Barnes. He says, "My experience leads me to conclude that in cases of urgent disease there is more frequent occasion to regret having delayed the operation too long than having had recourse to it too soon. When through obstinate vomiting, for example, nutrition has long been arrested, the starved tissues, craving for supplies and falling into disintegration, feed the blood with depraved and noxious materials; the system feeds upon itself and poisons itself; the poisoned blood irritates the nervous centers, and these centers, wrought to a state of extreme morbid irritability, respond to the slightest peripheral uterine or emotional excitation. All nervous energy is thus diverted from its destination and exhausted in morbid action. Irritative fever ensues; the pulse rises to 140 or more; no organ of the body is capable of discharging its functions, for the pabulum of life is cut off at its very source. At this point, labor, whether it occurs spontaneously, as it often does, or be induced artificially, comes too late. The tissues are altered, the powers are impaired beyond recovery, and death soon follows."

Shock may act profoundly upon the whole economy. Arrested digestion, perverted assimilation, suspended secretion, and limited excretion may occur to vitiate the nutritive fluids of the body. Elements which should go to feed the tissues and provide materials for secretions remain unappropriated; excrementitious substances accumulate, and the body becomes gradually saturated with effete matters. Operations for the relief of patients with old and tight urethral strictures complicated with disease of the kidneys affords illustration of the serious consequences which may follow shock in an already diseased organism. Internal division or forced dilatation of such a stricture may be attended with a degree of shock sufficient to arrest for the time the heart's action, or it may so act upon the whole nervous

system as to check secretion and excretion generally. The diseased kidneys may thus cease altogether to perform their functions, leading to speedy death from uremic poisoning; or, in the case of less aggravated renal trouble, the blood becoming surcharged with morbid material may no longer suffice to maintain the nervous centers in effective action; assimilation, secretion, and excretion may all fail, and death ensue from septicemia.

Anemia, resulting from sudden loss of blood, is particularly unfavorable to surgical interference. Besides the actual deficiency of blood, the diminished tension of the blood-vessels favors the absorption of septic products at the site of the injury; while the blood, diluted and vitiated by the additional fluids absorbed from the tissues, becomes loaded with effete organic matter, ready to take on putrefactive changes. A familiar instance of susceptibility to septic influences after a large hemorrhage will occur to every obstetrician who has learned how often metritis and septicemia follow excessive post-partum hemorrhage.

Besides want of space, another reason for the omission of reference to other conditions which may demand or forbid a resort to the knife is our want of exact knowledge. Especially is this true of those constitutional conditions we term diathesis. Using the word in its broadest sense, diathesis is any condition varying from the normal standard which disposes to the development of disease in the presence of trivial exciting causes. Other conditions which we habitually include under diathesis are themselves disease. Such, for instance, are scurvy, the scrofulous habit, tuberculosis, and syphilis. A diathesis may be transient or permanent, retrogressive or progressive. It may be so marked in its manifestations as to force its recognition upon even the most careless observer, or it may be so obscure as to elude the most painstaking scrutiny; and yet it may respond immediately and disastrously to an injury. In acknowledging our ignorance regarding the precise nature of such variations from the normal standard as we believe must exist in diseases like scurvy, scrofula, tuberculosis, etc., we recognize the existence of wide, uncultivated fields, rich, no doubt, in promise to future investigators. A more perfect animal chemistry, a more thorough histology, and a deeper research into the possibilities of pathological change will doubtless throw many a ray of light into regions where the darkness is now too dense for our vision to penetrate. To these fields coming generations of physicians will surely be attracted, in the faith that as man advances in knowledge and approaches somewhat nearer to the compre-

hension of the perfect wisdom which designed the wonderful physical organism, through which he is brought into relation with the world around him, he will be enabled to solve more and more of the difficult problems which now perplex and baffle us, and will gradually raise medicine to a position more nearly akin to that now accorded to the exacter sciences.

The Committee on Journalizing Transactions recommended the establishment of a weekly journal as the organ of the Association in the following resolution:

Resolved, That the president be authorized to appoint a committee of five to digest and report in detail, as soon as practicable, upon the time, place, and terms of the publication of such a journal, to elect an editor, fix his salary, and to arrange all other necessary details.

Adopted with so much of the resolution as related to the election of an editor struck out.

State Medicine.—Dr. J. L. Cabell read a paper on The National Board of Health and the International Sanitary Conference of 1881, which concluded as follows:

“There is therefore good reason for hoping that an international agreement may be arrived at between the States most frequently threatened with epidemic invasions. And, aside from this, the degree of attention which, as a result of the deliberations of the Conference, has been given to the subject of maritime sanitary police can not be without fruit in securing greater cleanliness, better ventilation of ships sailing on the high seas, and, in general, an improved sanitary condition of these important instruments of commerce, which become so often the carriers of the most deadly contagion from the failure to use such precautions as sanitary license suggests, and as it is hoped will now be enforced among the maritime powers of the world.”

Dr. C. F. Folsom, of Boston, in a paper which he read on The Relation of the State to the Insane, spoke of the difference adopted at this time in the treatment of the insane and as to that which was formerly adopted. He also gave valuable statistical information as to the number of insane in various sections of the country. He argued in favor of the establishment of State lunacy boards. Among the points made were, first of all, that a lunacy board should embrace men with a thorough knowledge of insanity and its treatment. The chief duties of this board should be to secure proper care for the insane in private dwellings, where they are very liable to neglect. Secondly, they should require the commitment of lunatics to the asylum by necessary copies of the commitment papers, and otherwise looking into the cases, so as to be able to tell whether the lunatic

should be retained for care or be discharged. The paper was able, and full of valuable information.

Dr. Charles F. Stillman, of New York City, read a paper upon A New System of Surgical Mechanics, illustrated by numerous drawings and instruments. The system demonstrated by Dr. Stillman is based upon the principle of *local extension* as opposed to *general extension* developed by all other systems, which local extension is produced by the use of the sector splint in the various forms shown by him as adapted to the several joints. He first traced the history of this sector splint from the initial idea of two slatted and clamped strips, attached by copper plates, to its present improved and varied form. Having given a cursory mention of Buck's extension, various modifications of the long splints, Hutchinson's method, and Thomas's plan, of Liverpool, he summed up the advantages of his system as follows: 1. Extension at any angle with motion; 2. Extension at any angle with luxation; 3. Fixation; 4. Motion complete or limited, constant or occasional; 5. Exposure of surface about the joint, admitting compression, elastic or otherwise, hot and cold applications, blisters, dressings, and easy inspection. This was followed by an exhibition of splints for the spine, hip-joint, knee-joint, ankle-joint, and elbow. Also an instrument for reducing cases of talipes in various forms and of long standing, by which instrument the surfaces of the tarsal bones are separated before the foot is made to assume a normal position.

Dr. Kinlough, of South Carolina, thought too much advantage was claimed for such contrivances; thought much could be done by rest secured in other ways; wished this fact was better appreciated; was sorry he could not share the enthusiasm of Dr. Stillman, but had failed to secure as good results.

Dr. Quimby, of Jersey City, N. J., indorsed fully Dr. Kinlough's remarks, and was especially emphatic in approving the treatment of clubfoot with adhesive strips, plaster of Paris, etc., instead of costly shoes and braces; thought mechanical instruments were sometimes useful, but were also capable of great abuse, and thought that they did not control muscular contraction.

Dr. D. H. Goodwillie, of New York City, read a paper on Treatment of Arthritis of the Temporo-maxillary Articulation. He reported cases treated. Causes of arthritis are local and constitutional. Whenever it occurs, the motion of the jaws becomes impaired according to the cause, severity, and length of the disease, and often requires long treatment to restore the muscles to their normal condition. The treatment of the arthritis is done by means of an apparatus to relieve the joint of pressure on the inflamed articular surfaces. It is made as fol-

lows: An impression of the teeth of either jaw is taken and an interdental splint made, the posterior part of which is raised a little for the purpose of a fulcrum, on which the back tooth of the opposite jaw rests. Another impression is taken of the chin, and a rubber splint is made to fit it. A skull-cap is next made to fit the head closely, with elastic bands on each side passing down from it and fastened to the chin-splint. The interdental splint is placed in position in the mouth, and the back teeth of the jaw closed on the fulcrum of the interdental splint; then when pressure is made on the chin by tightening the elastic bands connecting the skull-cap with the chin-splint the joint is relieved from pressure.

Dr. Moore, of Rochester, called attention to cases where cicatricial bands caused the trouble, division of which usually cured them.

Dr. S. D. Gross, of Philadelphia, saw comparatively few such cases since the abuse of calomel has ceased; had not been able to accomplish much with wedges, etc.; alluded to section of the bone; had performed the operation.

Dr. Hunter McGuire, of Richmond, Va., said that one of the cases alluded to by Dr. Goodwillie afterward fell into his hands, and he was sorry to inform him that the case was not cured. There was no motion whatever. As every other plan had been tried by Drs. Sayre and Goodwillie, Dr. McGuire took out a wedge-shaped piece of bone just at the angle. The result was good. Also spoke of a case where a bridge of bone passed from upper to lower jaw for eleven years; no movements in joints; yet returned quickly after division of the bridge of bone. Thought with wedges, etc., the treatment should be prolonged.

Dr. Jacobi, in discussing Eczema, remarked that he supported Dr. White, of Boston, in controlling scratching by mechanical measures. He said that if scratching was prevented children would recover as easily as adults, and that although the procedure was somewhat severe still the mother and nurse would be saved a great deal of trouble. The mask for the head had proved very serviceable in his hands. As regards Dr. Bulkley's views, he thought that the constitutional causes were nothing more than what we have in any affection. Dr. Jacobi agrees with Hebra that no water should be used. Very rarely and in special cases the judicious use of water may be of service. The main point is to remove the scabs. For this purpose potassa soap, very soft, may be used, or liquor of caustic potassa with ten or twelve parts of olive or castor oil can be applied twice, three, four, or five times during the day, and will produce remedial effects very quickly. The surface left exudes the serum, which hardens and forms the scab. This

serum must be touched and taken up with a soft towel, and finally astringents are applied to the raw surface. These applications can be made to please the fancy of the physician. Zinc and diachylon plaster are both valuable. A number of cases will not be cured, and then we must resort to constitutional treatment. The milk of the nurse must be rendered digestible, and it will be found that many children will thrive better on artificial food than on the milk of the mother or nurse. A good general condition of the system must be obtained. To say that an eczema can be cured forever, is perhaps going too far, for we see cases repeatedly coming under our observation as cured. Just as in insane asylums we notice cases that are published several times as "cured," so it may be in eczema or any other intractable affection.

Dr. Jacobi, in the absence of Dr. R. J. Nunn, of Savannah, read a paper for him on the Treatment of Diphtheria. The causative influences are probably not the same in all cases. Medicines which cure the disease in Germany fail in this country; and the discussions as to the identity of croup, diphtheria, and scarlet fever are strong arguments in favor of this belief, and all treatment based upon one cause must fail to relieve all cases. A powder used by Dr. J. B. Read is as follows: Sulphur sub. grs. xlvij; acid tannic, grs. xij; acid salicylic, gr. j; pulv. potass. chlor. grs. xij. Precaution must be used in compounding this prescription. A little of this powder is put on the back of the tongue every hour or two, and a small piece of ice given afterward. It will be seen that this prescription is a combination of antiseptics principally. In another case treated by Dr. Nunn the following formula was used with good effect: Sulphur, grs. vij; acid boric, grs. iv; acid tannic, gr. j; acid salicylic, gr. j; resorcin, gr. j. Another formula is: Sulphur sub. gr. viij; acid boric, grs. iv; acid benzoic, gr. j; acid salicylic, gr. j; acid tannic, gr. j; acid tartaric, grs. iv; sodii chlorid. grs. iv; resorcin, gr. j. Dr. Nunn thinks that this formula will prove efficacious.

Dr. Lathrop, of New Hampshire, has experimented with chloroform largely, and finds it a highly useful agent. He uses it in diphtheria and other throat affections on a piece of cotton attached to a tube or penholder. The cases usually required visiting no longer than four days, but the cases were not so malignant as reported in other localities. He stated that no unpleasant effects have ever followed this plan of treatment, and that the child in true diphtheria would not complain of *smarting* from the application of chloroform. He had used this plan of treatment in one hundred cases. Constitutional measures are added.

Dr. William Lee, of Baltimore, has used equal parts of tinct. ferri chlorid. and ol. ricini with benefit. He considers the disease as local at first and then constitutional. A physician from his county had used large doses of ol. copaiba with benefit. An emetic was then given to remove the membrane.

Dr. G. Vivian, of Minnesota, has used in severe epidemics alcohol as an inhalation, and has employed as much as a quart of alcohol a day. He has never seen any constitutional effects ensue.

Dr. J. McNeal, of Gettysburg, Pa., recommends the following: Potass. bromid. \mathfrak{z} j; potass. chlorat. \mathfrak{z} ij; acid carbol. grs. xx; aq. Oj. Use in an inhaler. Locally—chloroform, \mathfrak{z} ij; lin. saponis, \mathfrak{z} j to \mathfrak{z} ij.

Dr. F. E. Hitchcock, of Rockland, Maine, uses equal parts of sulphurous acid and water in an atomizer. The proportions can be varied and the acid used as a gargle. Cold affusion externally.

Dr. Jacobi, in answer to an inquiry concerning the benefit of pilocarpin, said that his opinion of it was unfavorable. It was proposed as a specific by a Dr. Guttman; and while on this subject he would state that this gentleman was not Dr. Guttman of Berlin. The article on pilocarpin had struck him as nothing more than an advertising arrangement. In diphtheria there are two forms—one in which the deposit can be readily separated from the mucous surface beneath, and one in which the deposit is deeply imbedded in the lower structures. In the latter form Dr. Jacobi believes that pilocarpin does harm, and in one case he thinks that death was hastened by using this drug. Pilocarpin debilitates the heart's action by giving rise to nausea and vomiting. The milder cases of diphtheria recover, as a rule, if left alone, and in all cases of the disease he thinks the utility of pilocarpin is doubtful. The paper in which pilocarpin was recommended as a specific is not satisfactory as regards the description of the cases treated; and to say that this and that remedy is a specific is certainly not dignified. If the remedy be used at all, a fluid extract is the best preparation, as the muriate of pilocarpin is decomposed in the stomach.

Dr. Jacobi also, in answer to a question from Dr. Lee concerning the effect of lime, said that his opinion of this agent was not so high as that of many writers, but that he would speak more fully of both lime and pilocarpin in his article on this subject.

Dr. W. C. Dabney read a paper on Nature and Treatment of Pneumonia, with conclusions as follows: Two views are held as to the nature of pneumonia—one that it is a specific fever; the other that it is a local inflammation, of which the fever is symptomatic. Argu-

ments in favor of the first view: 1. The disease ordinarily commences with a chill; 2. The constitutional disturbance is often out of proportion to the local disease; 3. The disease usually runs a definite course, and is self-limited; 4. The disease occasionally occurs as an epidemic. Arguments in favor of second view: Traumatic pneumonia is precisely similar to the idiopathic form. The indications of treatment in the first stage are (1) to lessen the amount of blood in the lungs and to check as far as possible the extension of the inflammation; (2) to reduce the temperature; and (3) to relieve pain. To fulfill the first indication, blood-letting, diaphoretics, saline purgatives, and cardiac sedatives are to be employed. To fulfill the second indication, quinine is the most important agent. To relieve pain synapisms, wet and dry cups and opiates may be resorted to. In the second stage the indications are (1) to lessen the consistency of the fibrinous exudation, and (2) to prevent over-distension of the heart. To fulfill the first indication, alkalies, especially carbonate of ammonia, are to be employed. To fulfill the second, alcoholic stimulants are especially useful. Digitalis may be also used with advantage. If so much respiratory surface is involved as to interfere seriously with respiration, oxygen gas should be used. In the third stage, tonics, a nutritious diet, etc., are advisable.

Dr. Lester, of Missouri, had failed yet to hear the argument which convinced his mind that pneumonia was a zymotic disease. He thought also that blood-letting was applicable to a very limited number of cases.

Dr. N. S. Davis, of Chicago, had never been able to decide that pneumonia was zymotic, but believed it to be local. He rose to protest against the course of reasoning pursued by some members. Even assuming that pneumonia was a zymotic disease and ran a definite course, this was no reason why it might not be cut short; and the physician had no right to fold his hands and do nothing because of such reasoning.

Dr. Lynch, of Baltimore, approved of Dr. Davis's remarks, but thought that in the present state of our knowledge we were not justified in using any remedy about which we were uncertain in an attempt to cut it short. In reference to the use of alkalies in pneumonia, he believed them to be valuable, particularly carbonate of ammonia, in certain stages of the disease, but not in the initial or even second stage.

Dr. Ochterlony said that it seemed to be settled by discussion that if pneumonia was a zymotic disease it could not be cut short, but if local it could. Pneumonia, he thought, was a self-limited disease. In regard to the zymotic character of the disease, he must confess his mind had not been convinced; thought it local; wished to call atten-

tion to the danger of death from heart-clot. He thought carbonate of ammonia useful in other stages besides the third.

Dr. Ball, of Ohio, thought the idea of pneumonia being a self-limiting disease, and founding treatment upon that idea, to be exceedingly erroneous, and calculated to do great harm. Thought the disease could be cut short, and called attention to the method of treatment by repeated emetics early in the disease, and claimed that it was valuable in aborting the disease.

Dr. McCaul, of Michigan, thought that in his section venesection was not admissible, and that cardiac sedatives must be used with extreme caution. Did not think the disease was purely zymotic, but thought there was a zymotic condition of blood which tended to produce it.

Dr. Whittaker, of Cincinnati, asked, If pneumonia was a local disease, what caused it? Certainly exposure did not. We had, he thought, no right to call it a local disease until we knew its etiology.

Dr. Chadwick, of Boston, chairman of Section on Obstetrics and Gynecology, closes an able paper with the following general conclusions:

"The above quantitative analysis of obstetric and gynecological literature with regard to nationalities manifests the prominence of America in this branch of medicine. America contributes more journal articles than any other nation; supports by contributions, both literary and pecuniary, as many special periodicals as France, and twice as many as either England or Germany, and carries on as many special societies as all the other countries of the world together. England, despite the labors of Wells, Keith, Thornton, Barnes, Duncan, Tait, Leishman, and Playfair, is fast losing its preëminence in this branch of medicine, and has recently demonstrated its inability to support even one special journal by the discontinuance of the *Obstetric Journal of Great Britain and Ireland* on January 1st of the present year. France is exhibiting an unnatural activity under special influences already adduced. Germany holds on the even tenor of its way, while Belgium, Italy, Spain, Denmark, and Russia are awakening to a more active participation in the advance and dissemination of obstetric and gynecological lore.

"I have throughout these pages restricted myself to a quantitative study of the literature. I can not close without giving in a few words an estimate of the quality of each nation's contributions to the science and practice of gynecology and obstetrics. Germany unquestionably advances pure science more than any other nation; the papers in its three journals are the most profound and the most critical. France

manifests a great dearth of original ideas and a most discursive style of discussion, but considerable painstaking historical research; its journals are prolix, and, for the most part, profitless reading, and exceed in number the legitimate demand. England exhibits a waning interest in this branch of medicine, little originality, but a notable discrimination in adopting new theories and applying them to practice; its only special journal died a natural death at the close of the last year. To America I have no hesitation in according preëminence in this special field. Our countrymen meet the emergencies incident to child-bearing with a quickness of perception and readiness of action rarely seen in other countries. Their ingenuity has led them to devise new operations in gynecology and to carry their art with brilliant results, so that today the practice of that branch has reached a stage here far in advance of other nations. Of course our natural aptitudes lead many of us to overestimate the beneficial results of surgery; but, taken all in all, close observation and study in most of the countries of Europe has confirmed me in the opinion that in obstetrics and gynecology America leads the world. The two most prominent exponents of our branch in America, *The American Journal of Obstetrics* and the *Transactions of the American Gynecological Society*, present a more happy blending of scientific facts and practical suggestions than is found in any other special gynecological or obstetrical journals in the world."

Operative Interference in Gunshot Wounds of the Peritoneum was the title of a paper read by Dr. Hunter McGuire, of Richmond, chairman of the Section on Surgery. Few surgeons have had greater experience in treating gunshot wounds occurring both in military and civil life, and few have appreciated more fully how unsatisfactory are the results obtained from the expectant or do-nothing plan so much in vogue. The title of the paper indicates the grounds taken by the writer in favor of operative interference, and the views embodied in the paper tend to prove the position advanced by the writer that the patient will exchange an almost certain prospect of death for at least a good chance of recovery, and should, we think, embolden surgeons to think less of expectant treatment and more of operative interference. Statistics from the Crimean, the French, and the late civil war in America show that more than nine out of every ten cases of wounds of the belly opening into the cavity of the peritoneum perish, no other gunshot wounds being so deadly, not even penetrating and perforating wounds of the skull. In incised, punctured, and gunshot wounds of the peritoneum the general plan of treatment has been to enjoin absolute rest, give opium to prevent peristaltic action, and encourage the

formation of adhesions, in the idle hope of preventing extravasation into the peritoneal cavity. It is claimed that the wound may paralyze the muscular coat of the bowel, or in small wounds the mucous coat is everted and closes the aperture, or the part injured may not be covered with peritoneum and no extravasation take place within the peritoneal cavity, or that the serous membrane covering the intestine near the point wounded may become adherent to the omentum, to the bowel, or to the abdominal wall, and the orifice in the bowel become permanently closed; and last, but very rarely, the extravasated mass may become encysted, end in abscess, and discharge itself through the neighboring skin or mucous surface. In the opinion of the writer, when we remember that the alimentary canal is never completely empty, common sense teaches us that when an opening is made in any portion of the peritoneal cavity its contents will escape; that there will probably be less resistance to the passage of fecal matter through the unnatural aperture than along the sides of the canal itself. Gas may first be expelled, separating peritoneal surfaces, and then the fluid or solid contents of the bowel follow. Only one or two exceptions to this rule are reported in the history of the late war between the North and South. But besides alimentary effusion, blood, air, bile, and urine may also be extravasated into the peritoneal cavity. Penetrating wounds of the belly, with fecal effusion, are rapidly followed by general acute peritonitis. Ninety per cent die, and within forty-eight hours. Does peritonitis from any other cause, as a rule, kill as quickly? In spite of the assertion of Malgaigne and others that the organs contained in the belly fill the cavity to such repletion that shot-wounds of that space without visceral injury are impossible, post-mortem examinations and experiments upon dead bodies show that wounds of the peritoneum can be made without injury to the contained viscera. It has fallen to the lot of the writer to witness four such cases. Two occurring in civil life, and being the subjects of legal investigation, careful autopsies were made. Two were soldiers dying from peritonitis, and the autopsies showed no visceral lesion. These four cases, coming under the observation of one individual, and having their exact character shown by post-mortem examinations, prove that such results are not impossible and probably not as rare as we have been led to suppose. Those rare cases of recovery from penetrating wounds of the abdomen have induced surgeons to continue the expectant plan of treatment in place of what appears at first sight to be a desperate surgical interference. Some of the alleged recoveries may have been wounds of a portion of the large intestine not covered by peritoneum. Recovery, with fecal fistula, is not uncommon in this case; others may

have been penetrating wounds without visceral injury; others again may have been parietal wounds without peritoneal penetration. In connection with the four cases of gunshot wounds of the peritoneum alluded to by the writer, and in which there was no visceral injury, the total absence of shock was remarkable, and no diminution of temperature. One of them (a soldier) assured the writer that he did not know that he had been wounded until some time after he had been shot. Another (wounded in a duel) insisted that he was able to stand up and give his antagonist another fire. On the other hand, in all cases with visceral lesions the shock of injury is a prominent symptom. The presence or absence of shock seems to be a diagnostic point of no little value. If to this be added sudden meteorism, the character, extent, and direction of the wound, bloody discharges from the bowels or stomach, an almost certain diagnosis by rational symptoms will be reached. In reply to the question, why are these injuries so fatal? why, after escaping death from peritonitis, shock, and hemorrhage, peritonitis is fatal in forty-eight hours? the writer attributes death to some kind of blood-poisoning connected with peritonitis, just as we often see septicemia associated with peritonitis under other circumstances, notably after parturition and ovariectomy. He believes that the blood-poisoning after gunshot wounds of the peritoneum is consequent upon the pent-up, red, sero-fibrinous exudation which traumatic peritonitis invariably produces in abundance, and that if this effusion could be drained off as soon as it is formed septicemia might be prevented. In lacerated wounds of the abdominal walls, with exposure of the cavity, protrusion of the contents and the introduction of foreign matter into the cavity are nothing like so mortal. In all these cases the nature of the wound prevents union by the first intention, and drainage of abdominal effusions is effected. In the fifty-nine cases of recovery after penetrating wounds of the large intestine fifty-five were perforating wounds, the large aperture of exit being usually on the posterior surface of the body, dependent and facilitating drainage. In one of the four instances of recovery in simple penetrating shot-wound of the large bowel, the edges of the opening in the bowel were fastened to the wound in the abdominal wall, and in this, as well as in the other three cases, fecal fistulæ were formed. Shot-wounds of the pelvis are nothing like so fatal as wounds of the peritoneum higher up. Unless accompanied by grave visceral lesion, three cases out of four of penetrating or perforating wounds of the pelvis recover. Can this fact be satisfactorily explained upon any other theory than that drainage in these wounds is almost unavoidable? Indeed in these cases we are taught to explore the wounds with the finger, remove loose pieces

of bone and foreign bodies, and keep the apertures of entrance and exit open, that free vent may be given to all inflammatory products; and if the size and position of the wound do not facilitate this we make the opening bigger and insert a drainage-tube. Spencer Wells attributes the fatality after ovariectomy to some form of pyemic fever or some form of blood-poisoning so often associated with peritonitis, and thinks the lesson taught by many successful ovariectomists of providing for the escape of inflammatory matter of great value, and one which should be profited by by the surgeon who treats gun-shot wounds of the peritoneum. Ovariectomists even go so far as to wash out the cavity when peritonitis exists and death from septicemia is imminent. In many of the cases of penetrating wounds of the peritoneum the ball passes obliquely through the abdominal wall, and the aperture shuts up like a valve, or if passing directly through the parietes the aperture of entrance contracts at once and closes. To all intents and purposes the cavity is hermetically sealed, and the missile, pieces of clothing, blood from wounded vessels, fecal effusion if the intestine is wounded, and inflammatory products are all hopelessly imprisoned there. Can it be wondered that such wounds are fatal? In no other gun-shot wounds of cavities do we allow the wounds of entrance and exit to be closed. Who would think of shutting up the opening in gun-shot wound of the knee-joint? During the late war the plan of hermetically sealing up wounds of the pleura—a structure analogous to the peritoneum—proved most disastrous. In gun-shot wounds of the chest involving the serous membrane we keep the wound patent, and if not dependent we do not hesitate, when effusion takes place, to make a counter-opening with a knife or trocar, and sometimes to flush out the cavity with detergent and antiseptic lotions. In view of these facts the writer ventures to advocate operative interference in gun-shot penetrating wounds of the peritoneum with intestinal injury, in penetrating wounds of the peritoneum with any visceral lesion, and similar cases without visceral injury. The wounds in the abdominal walls should be enlarged, or the linea alba opened freely enough to allow a thorough inspection of the injured parts. Hemorrhage should be arrested. If intestinal wounds exist they should be closed with animal ligatures, trimming their edges first if they are lacerated and ragged. Blood and all other extraneous matters should be carefully removed, and then provision made for drainage. If the wound of entrance is dependent, drainage may be secured by keeping this open. If the wound is a perforating one, and the aperture of exit dependent, the patency of this should be maintained, and, if necessary, a drainage-tube of glass or other material introduced. If there is no wound

of exit, and the wound of entrance is not dependent, then a dependent counter-opening should be made and kept open with a drainage-tube. If it is urged that the means suggested are desperate, it can be said in reply that the evil is desperate enough to justify the means.

Dr. Charles A. Leale, of New York, read a paper on labial carbuncle or malignant pustule of the lip. His method of treatment is to make a free incision outward and downward along the course of the fibers of the orbicularis oris muscle, extending the cut each way in a line until all the diseased tissue has been passed, taking care not to go through the mucous membrane lining the lip, to which extent the disease rarely extends; then with a fine piece of ivory or wood, with its ends covered with cotton, thoroughly apply to all the diseased parts and cut surface the chemically pure nitric acid. This is pressed with sufficient force into all the diseased parts so that every little pocket of pus is reached and the intervening membranes destroyed, which would otherwise be left to slough off and continue the septic or purulent infection. By this time the nervous and constitutional systems are very much depressed, and for the relief of the former and pain he gives morphia *pro re nata*, and to overcome the blood-poisoning whisky is given liberally, largely diluted with water. On some occasions he has had to apply the acid on the second or third day, or until all the poison has been rendered inert. His subsequent treatment is by the open-wound method, applying ung. bals. Peru gently on lint and giving the patient the most nutritious diet and restorative tonics. Dr. Leale claims that by this treatment all the little canals making the cut surface appear like a sieve are reached, and that the entire poisonous mass is kept within circumscribed boundaries, and the absorbed poisons, by sustaining the system, are eliminated. In the early part of the treatment a full dose of sulphate of magnesia largely diluted in water is given. As a rule, it will be found that on the third or fourth days after the incision and the first application of the acid all danger will have subsided and the convalescence will steadily progress. But in some instances we may have acute mania from cerebral meningitis or erysipelas—the former to be treated by large hypodermic injections of morphia, and the latter, when possible to be retained, the cooling lotion of lead and opium.

Dr. Post stated that the subject was a most important one. He thought that when we see the patients early with malignant pustule a large proportion can be saved. He usually operated by cutting through the vermilion border of the lip.

Can we make a Positive Diagnosis of Pregnancy previous to the Occurrence of the Audible Sounds of the Fetal Heart and the Detec-

tion of the Fetal Movements? was the subject of a paper by Dr. Joseph Tabor Johnson, of Washington, D. C. It is claimed that in the softened condition of the cervix uteri and the pinkish color and increased temperature of the vagina we have quite positive diagnostic evidence of pregnancy. It is admitted that the only positive and indisputable signs are determined by auscultation, ballotement, and fetal movements; but these signs are not usually present in the first half of pregnancy. The presence of kiestine in the urine, milk in the breast, the odor of vernix caseosa upon the finger as it is withdrawn from the vagina after a digital examination, the smooth condition of the anterior wall of the vagina and anterior cul-de-sac, associated with a pinkish-purple color of the vaginal mucous membrane, the placental souffle, the existence of gravidin in the urine, the presence of certain caseous elements resembling milk in the urine, were all passed in review as diagnostic signs of pregnancy, but no definitely-stated conclusion was arrived at.

Dr. R. Beverly Cole, of San Francisco, California, stated that there were three physical signs of pregnancy which he relied chiefly upon, viz: 1. Placental souffle; 2. Pulsation of the cord; and 3. The sounds of the fetal heart. He regarded the last as the best and most reliable of them all. Dr. Cole thought no signs positive enough generally to justify one in giving *decided* opinions when consulted on this point.

Dr. Albert H. Smith, of Philadelphia, thought placental souffle the most unreliable of the signs mentioned by Dr. Cole. Liked the bi-manual method best of all.

Dr. Paul F. Mundé said his favorite method was the bi-manual. He thought Dr. Smith had touched the key-note in making this statement. He thought that this method, taken with the other signs usually associated, would enable one to make out a case better than any other methods he knew of.

Dr. Alex. Dunlap, of Ohio, said his method was the bi-manual. The presence of fibroids may sometimes mislead, as they enlarge the womb, but they are generally hard when small, sometimes soft and dropsical when large, and rarely symmetrical. These points he thought it well to notice. Sanious discharge from the os is strong evidence of intra-uterine fibroid.

Dr. James M. Scott, of St. Louis, asked if it was not difficult to use the bi-manual method on a fleshy patient, which was answered in the affirmative.

Prof. G. M. B. Maughes, of St. Louis, thought that we have an almost certain method in the bi-manual.

Prof. A. F. Erich, of Baltimore, thought the thermometric in-

dications in the os uteri would prove of great value as an aid in diagnosis.

Dr. Whittaker, of Cincinnati, read a paper on The Treatment of Diphtheria, taking the ground that diphtheria was first a local and afterward a general disease; that it is only when the epithelial barrier is broken down that the blood and the body become infested. The essayist maintained that the poison passes over into the blood little by little, new quantities reinforcing the first installments until the blood is super-saturated with the disease. The treatment therefore resolved itself into treatment of the poison at the local depot and relative neutralization of virus in the blood. The efficacy of the antiseptics, quinia, salicylic acid, and the benzoates, was next detected with the experiments with the latter of Buckholtz and Graham Brown, whereby it was shown that saturation of the blood with the benzoates renders inoculation impossible. The essayist next maintained that although we could not kill the germs of the disease in the throat, we could so condense its mucous membrane as to make it a dam to the influx of the disease. To effect this purpose the essayist recommended the persulphate of iron in full strength applied well up behind the velum palati. Though the persulphate of iron was one of the oldest recommendations of practical medicine in the treatment, the author believed its occasional inefficacy and present comparative disuse to be due to the dilution of the solution. The author knew very well the fallacy of basing conclusions upon experience, and mentioned the fact that he had never had a fatal case since the use of this treatment, and stated that he had never seen any accidents incidental to the treatment.

The following officers were elected for the ensuing year: President, Dr. T. J. Woodward, U. S. A.; Vice-presidents, Drs. P. O. Harper of Arkansas, L. Conner of Michigan, Eugene Gressom of North Carolina, and Hunter McGuire of Virginia; Secretary, Dr. Wm. B. Atkinson of Pennsylvania; Treasurer, Dr. R. J. Dungleison of Pennsylvania; Librarian, Dr. Wm. Lee of Washington; To fill vacancies in the Medical Council, Drs. S. N. Benham of Pennsylvania, J. M. Toner of Washington, D. A. Linthecum of Arkansas, William Brodie of Michigan, H. D. Holton of Vermont, A. B. Sloan of Missouri, and R. B. Cole of California.

St. Paul, Minnesota, was selected as the place for the next annual meeting, and Dr. Stone was appointed chairman of the Local Committee of Arrangements.

Personal.—Dr. Joseph J. Woodward, the newly elected president, is from Washington, D. C. He was born in Philadelphia in 1832. He was educated at the Philadelphia Central High School, from which

he received the degree of A.B. in 1850 and that of A.M. in 1855. After receiving his first degree he began the study of medicine, and graduated from the University of Pennsylvania in the spring of 1853, For some time thereafter he practiced his profession in Philadelphia. acting during that time as examiner and teacher upon microscopical and pathological anatomy. He entered the army and rose rapidly, and is now the chief assistant in the surgeon-general's bureau at Washington, with the rank of lieutenant-colonel. He is the medical editor of the Medical and Surgical History of the Rebellion.

Dr. P. O. Hooper, of Little Rock, Ark., the first vice-president, was born in that city October 11, 1833. He was educated at Nashville, Tenn., and graduated in 1856 from Jefferson Medical College, Philadelphia. He is a member of the Arkansas State Medical Society and of the College of Physicians and Surgeons of Little Rock, and is also a permanent member of the American Medical Association. He is president of the Board of Trustees of the Arkansas State Lunatic Asylum. During the war he held the position of surgeon in the Confederate Army, and was president of the Army Medical Board for the examination of applicants for position in the medical department of the Confederate Army.

AMERICAN MEDICAL COLLEGE ASSOCIATION.—This body met in Richmond, Va., May 5th, with quite a full attendance. The meeting was called to order by the president, Professor S. D. Gross, M.D., of Philadelphia, Professor Leartus Connor, of Detroit, acting as secretary. The following officers were elected for the ensuing year: President, Professor J. M. Bodine, of the Medical Department of the University of Louisville, Ky.; Vice-president, Professor W. T. Briggs, of Nashville, Tenn.; Secretary and Treasurer, Professor Leartus Connor, of Detroit, Mich.

Secretary Connor's report was then presented and received. It shows an increase of two in the active membership of the Association since the last annual meeting. From the reports of the several colleges made to the secretary it appears that these institutions had conformed more universally and completely with the requirements of the Association than heretofore, and that every thing pertaining to their connection with the body was entirely satisfactory.

The report of the Committee on Medical Colleges showed

that sixty-four catalogues of colleges had been examined, and that only sixteen of them had failed to come up to the Association's requirements in the matter of graduation. It also appeared that twenty-two of the colleges had surpassed these requirements in one or more of the three following particulars: First, matriculation examinations; second, nine months' regular attendance; third, the three regular terms required.

